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AIR TRAFFIC CONTROL TRAINING GUIDE



MANAGEMENT

TRAINER QUALIFICATION TRAINING PACKAGE

AT-M-01

Purpose

This publication is for use in the training of USAF air traffic controllers on developing, implementing, and managing an effective air traffic control training program. Designed to be a controller's first exposure to training fundamentals, it is not intended to replace, substitute for, or supersede official regulations, procedures, or directives.

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Chief, Airfield Operations and Training Division

PREFACE

The duties of an Air Force trainer rank among the most important in the entire military. The trainer not only indoctrinates new airman into the procedures of a chosen career path, but also leaves a lasting impression of what it takes to be successful in the Air Force. Commitment, loyalty, and integrity are only a few of the traits inherent in a military trainer. The Air Force trainer must display these traits and set a pristine example one hundred percent of the time in order to mold a viable, dependable professional that will carry on the finest traditions of the United States Air Force.

The *Trainer Qualification Training Package* (QTP) is an instructional document designed for use at the unit level to qualify an individual as an air traffic control trainer. It is composed of training objectives, references, an ATC Trainer Job Qualification Standard (JQS), and learning text to provide the trainer and trainee a clear path on how to achieve the stated objectives. Upon completion of this training package, ensure the JQS is completed and entered into the individual's AF Form 623.

This (QTP) was developed with the goal of allowing the trainer to see Air Force training not only from a quality perspective, but also as a process of teaching adults how to perform specific tasks. Training objectives transition from theoretical concepts to realistic application. The following time requirements are suggested for completion of this document:

Section One	Controller Development Program	3 days/ 6 hours
Section Two	Training Qualifications and Responsibilities	2 days/ 4 hours
Section Three	Understanding and Communicating with Trainees	5 days/10 hours
Section Four	Keys to Adult Learning	5 days/10 hours
Section Five	Planning and Conducting On-the-Job Training	2 days/ 4 hours
Section Six	Air Traffic Control Training	8 days/16 hours
Section Seven	Appraising Trainee Performance	7 days/14 hours
Section Eight	Air Traffic Control Rating and Withdrawal Procedures	4 days/ 8 hours
Section Nine	Air Traffic Control Training Documentation	9 days/18 hours
Total Recommended Completion Time		45 days/90 hours

Each section of AT-M-01 contains specific objectives to measure for each task item listed in the JQS. Standards necessary to complete trainer qualification remain constant throughout the document. Minimal assistance is considered a subjective standard, allowing each facility to inject whatever amount of mentoring is necessary to groom controllers as trainers. Upon completion of each training objective, document the completion date and continue to the next training section.

Air Force publications used to compile this workbook are:

AFMAN 36-2234 - *Instructional Systems Design*

AFI 13-203 - *Air Traffic Control*

AFI 36-2201 - *Developing, Managing, Conducting Training*

AFMAN 36-2247 – *Planning, Conducting, Administering, and Evaluating Training*

CFETP 1C1X1 - *Air Traffic Control Operations Career Field Education and Training Plan*

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SECTION ONE

CONTROLLER DEVELOPMENT PROGRAM

People are the decisive factor in war. It is imperative that people receive the right education and training at the right time – AFMAN 1-1

The Controller Development Program (CDP) is an all-encompassing training program designed to provide air traffic controllers unit level training to meet specific mission needs. The purpose of the CDP is to qualify air traffic controllers for position certification/facility rating, skill-level advancement, and facility management positions. It includes upgrade, qualification, recurring, and review training; certification guides; combat skills familiarization training; evaluations; automation and simulation; and, is outlined in detail in the facility CDP Operating Instruction.

Objectives

To complete this section of instruction, the following objectives must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is three days or six hours.

Task	References	Objective
1a Controller Development Program 1b CDP Operating Instruction 1c Facility Master training Plan	AFI 13-203, Chap 6, Atchs 11 & 12; AFMAN 36-2247, Chap 2; AT-M- 01; CDP OI	Explain the purpose of each component of the CDP and Master Training Plan. Determine if all the essential requirements are included. Apply each section of the CDP OI as it applies to controller training
1d Instructional System Development	AFMAN 36-2234, Chapter 1; AFI 13-203, Atch 12; AFMAN 36- 2247, Chapter 2; AT-M- 01	Explain the concepts of ISD and they apply to ATC training. Explain how position certification guides are developed using the ISD process.
1e Career Field Education and Training Plan (CFETP)	1C1X1 CFETP; AFI 36- 2245, Chap 2; AT-M-01	Explain the purpose of the CFETP and how it is utilized in ATC training. Explain how each Job Qualification Standard from 1C1X1-001 has an origin in the CFETP. Demonstrate the ability to find specific training items in the STS and how they relate to technical school training and five level upgrade training.
1g Training Review Board (TRB)	AFI 13-203, Chap 6; AT-M-01; CDP-OI	Explain the purpose of the TRB and how ATC training is addressed at the TRB, and who is required to attend. Attend a TRB and debrief the results to the watch supervisor.

Explanation of Terms

Upgrade Training – Training necessary to be awarded a higher skill level. Requirements differ with each skill level and usually involve specific career field learning (position certifications, etc.), and completion of Air Force time in grade and rank achievement.

Qualification Training – Actual hands-on task performance training designed to qualify an individual in a specific duty position (i.e. local control, approach control, etc.) It is designed to provide the performance skills required to accomplish the job.

Recurring Training – Training provided to periodically review selected current operational procedures and techniques. Recurring training is usually accomplished each month through the monthly proficiency test program.

Review Training – Training conducted for the purpose of correcting specific operational deficiencies detected through performance evaluations, supervisory observations, trends, operational evaluations, etc.

Position Certification – An endorsement by the Chief, Standardization and Evaluation (CSE) (or designated representative) that a controller has demonstrated the competence, qualifications, and skill required to operate at a specific position unmonitored (i.e. ground control, approach assistant, etc.).

Facility rating – An endorsement by the CSE (or designated representative) that an individual has demonstrated the competence, qualifications, and skills required to control traffic at positions included in the type of facility rating issued (i.e. control tower, RAPCON).

Certification Guides – Position certification guides (PCG) are documents prepared by the Chief, Air Traffic Control Training (CATCT) to assist the trainer and supervisor in logically training controllers in specific positions in a control facility. Task certification guides (TCG) are training materials focusing on non-control positions such as watch supervisor, trainer, chief controller, etc.

Components of the Controller Development Program

The CDP consolidates and standardizes air traffic control training by integrating Air Force, MAJCOM, and unit directives into one program. The CATCT is responsible for developing the CDP utilizing AFI 36-2201, *Developing, Managing, and Conducting Training*, and AFMAN 36-2234, *Instructional System Development*. It must include all necessary training materials, references, and tests as well as provide the trainer and trainee a logical sequence to follow in order to successfully accomplish training. Figure 1-1 provides an example of some of the CDP components.

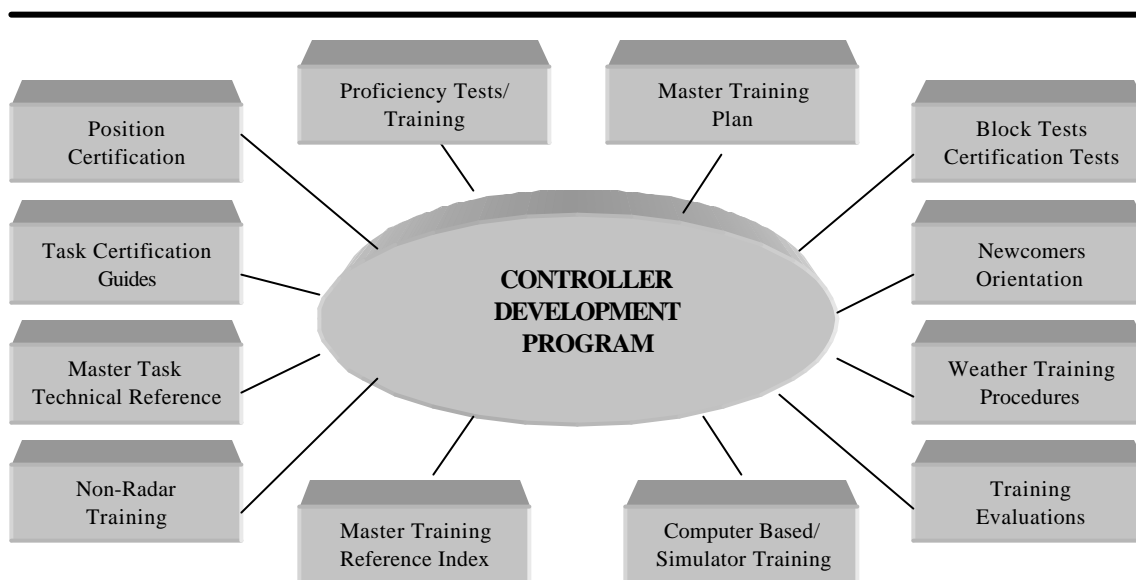


Figure 1-1

As air traffic control trainers, each facet of the CDP is necessary in order to provide the trainee the best possible training environment. For example, position (or task) certification guides are mandatory in order to ensure all required information is covered during the training sessions. Up-to-date training references allow the trainee to research and explore specific topics covered in individual lessons. Block tests provide the trainer milestone evaluations to assess the trainees progression.

Controller Development Program Operating Instruction

The CDP Operating Instruction (OI) is the foundation document of the entire air traffic control training program for a facility. The Airfield Operations Flight Commander (AOF/CC), along with the CATCT and Chief Controller (CCTLR), must ensure the OI reflects the current training needs of the entire operation and is implemented correctly to ensure mission accomplishment. The CDP OI establishes policies and procedures for implementing each segment of the Controller Development program (Figure 1-1) and defines the responsibilities of all personnel involved in the program. As a minimum, the CDP OI must set specific guidelines on how to complete the following tasks:

- Establish procedures for indoctrination of new control personnel
- Provide a three level task evaluation program
- Explain how to conduct upgrade training for each facility
- Define how qualification training is conducted and establish time lines for each position
- Explain monthly proficiency test procedures and follow-on review training
- Establish a dual qualification training program (where applicable)
- Outline Training Review Board procedures
- Explain how training evaluations and documentation will occur for each facility
- Establish a training program on weather observation and reporting programs
- Provide guidelines on simulator, computer based, and non-radar training
- Define combat skills familiarization training
- Define specific training needs reflecting mission necessities

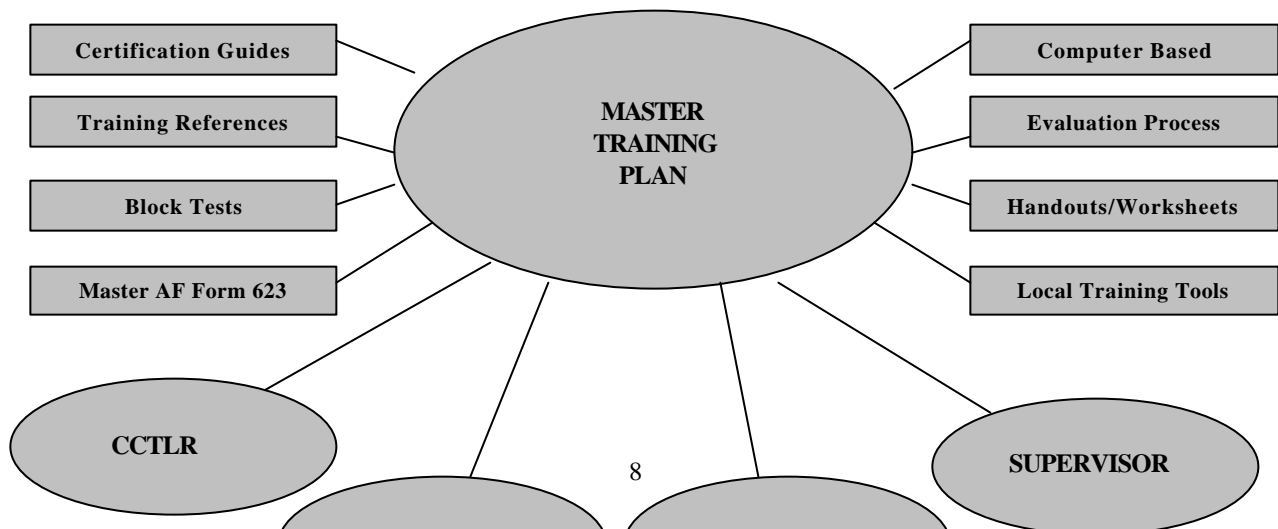
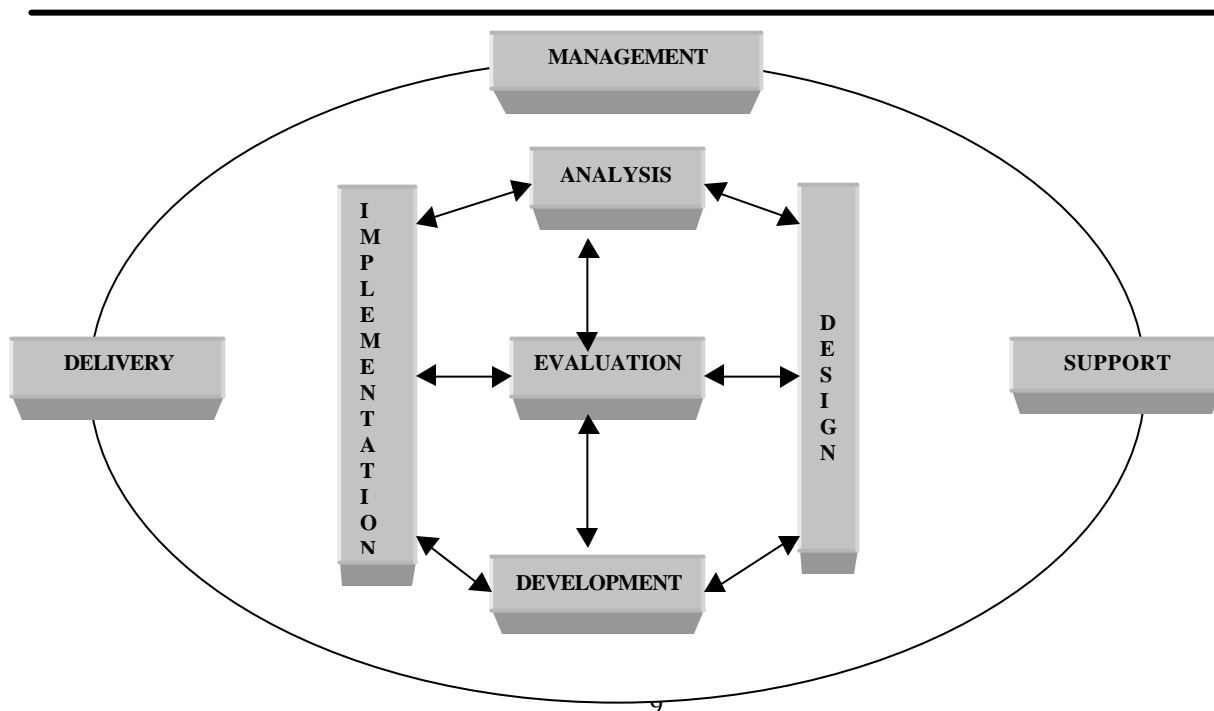


Figure 1-2

The CDP OI is reflected in each control facility in a Master Training Plan. Trainers should be completely familiar with the location and content of the master training plan and how to use it as a training tool. The facility training plan should include all the necessary training documents, references, evaluation items, handouts, position certification guides, master AF Form 623, computer based training programs, and any training tools specific to the operation or facility. The key to the successful implementation of any master training plan is the participation of all facility personnel, especially the CCTLR, supervisor, trainer, and trainee. Refer to Figure 1-2.

Instructional System Development

Instructional System Development (ISD) is a systematic approach used in the process of planning and developing training programs which ensure personnel are taught the knowledge and skills essential for successful job performance. ISD calls for analyzing and documenting job performance requirements and developing explicit training objectives stated in terms of expected performance (behavior), conditions under which that behavior is to be performed, and the standard to which it is to be performed. Training or objectives not necessary for job performance are eliminated. Certification guides and performance and knowledge tests are designed utilizing ISD principles. Though a trainer is not required to build these products, it is important to realize the background of how instructional products are designed. Refer to Figure 1-3 for an illustration of the ISD process.



ADMINISTRATION

Figure 1-3

From the description of the ISD process, it is apparent that developing an instructional system involves a great effort. Practical consideration such as time, money, other resources, and the number of personnel to be trained will dictate the depth of ISD principles to be applied. As a minimum, the following essentials should be accomplished:

- Determine the essential job tasks
- Determine the skills and knowledge required to perform these tasks
- Develop objectives that, when met, will ensure achievement of the skills and knowledge
- Develop test items for these objectives that are standardized and can be used to determine whether or not the objectives are achieved
- Devise the means for the trainee to achieve these objectives
- Determine whether or not the trainee has achieved the objectives

The correlation between ISD and the trainer/trainee relationship is through position/task certification guides. When a trainee is placed into position qualification training, the trainer is issued a position certification guide that completely outlines the required training progression for that position. Each learning objective will have four distinct components (task, reference, objective, and standard) with other optional information provided depending on the facility.

Task – A task listing is developed by completing a thorough evaluation of a specific activity. AFJQS 1C1X1 is an example of a task evaluation for air traffic control. A position certification guide is a reflection of a task analysis done on a specific control position.

Training Reference – Each task item in a position certification guide must be accompanied with the technical references to support that item. References can be from a myriad of sources such as FAAO 7110.65, AFI 13-203, computer based training presentations, and air training series, just to name a few. Each reference must support the training objective and supply the trainee with all the necessary information to become proficient in that learning objective.

Objective/Standard – An objective is a precise statement of the learned capability – skills, knowledge, or attitudes (SKA) – a student is expected to be able to demonstrate the condition under which the SKA is to be exhibited and the minimum standard of acceptable performance. Objectives must be short ranged and easily attainable. They must establish clear and concise student goals while determining the content of the instructional system. Objectives are broken down into three components: 1) Behavior – the task to be accomplished; 2) Condition – the situation under which the task is to be performed; and 3) Standard – the level of proficiency.

Examples of Poor Objectives

Examples of Good Objectives

1. “Understand tower procedures”

1. “The trainee shall, in a live environment, demonstrate the ability to control heavy jet aircraft with no separation errors”

2. “Know radar procedures”

2. “The trainee shall, in a live or simulated environment, separate formation flights from other aircraft with no more than one error, except no errors may be made involving altitude assignment and/or separation”

In each of the good examples there is a *behavior* – “control heavy aircraft”, “separate formation flights from other aircraft”; a *condition* – “in a live environment”, “in a live or simulated environment”; and a *standard* – “with no separation errors”, “with no more than one error, except no errors may be made involving altitude assignment and/or separation.” Refer to Figure 1-4 for an example of a learning objective found in a position certification guide.

BLOCK 3

START DATE _____

COMPLETION DATE _____

BLOCK OBJECTIVES: Demonstrate the knowledge/skill of radar procedures associated with the arrival position as described in the tasks below; provide proper coordination, radar/nonradar separation, and safe traffic management actions in the correct order and priority, with only one assist from the trainer.

JQS KNOWLEDGE/TASK ITEMS: 5a, 5d, 5e, 5f, 5k

RECOMMENDED TIME FOR BLOCK 3 REQUIREMENTS:

3 Skill Level: 80 hours/40 days

5/7 Skill Level: 40 hours/20 days (without prior similar experience)

5/7 Skill Level: 30 hours/15 days (with prior similar experience)

TASK	Describe the Minimum Vectoring Altitude (MVA) Chart
JQS	5a
TR	Local Area Knowledge Guide, Minimum Vectoring Altitude Chart

BEHAVIOR: The trainee should be thoroughly familiar with the MVA for all airspace associated with the South Arrival position. The trainee should be familiar with each radial and DME associated with the MVA Chart.

Training Publications/References

There are many regulations, publications, and documents available affecting air traffic control operations and training. For the purpose of providing training, they can be broken down into two categories, publications and references. Publications are those documents that have no direct bearing on the training environment in the facility, but are necessary for the development, administration, or implementation of an effective program. References are documents that are listed in each position certification guide and are necessary to complete trainee qualification training. All must be listed in a Master Reference Index and available to every air traffic controller.

Publications

AFMAN 36-2234 - *Instructional System Development* – describes principles and processes for developing education and training programs in the United States Air Force.

AFI 36-2201 - *Developing, Managing, and Conducting Training* – prescribes Air Force training policy, training requirements, and validation. Establishes responsibilities for the development, management, and conduct of military training.

AFMAN 36-2247 – *Planning, Conducting, Administering and Evaluating Training* - Supports AFI 36-2201 by providing a paced approach to applying and accomplishing each task through numerous examples, illustrations, and explanations.

AFMAN 36-2108 - *Airman Classification* – Establishes the occupational structure of the enlisted force. Includes duty descriptions, responsibilities, and Special Experience Identifiers (SEI).

AFCAT 36-2223 - *USAF Formal Schools* - Describes overall training and education program procedures, including responsibilities of HQ USAF and MAJCOMs for conducting formal schools and courses.

* Other publications exist though not listed.

References

FAAO 7110.65 – *Air Traffic Control* – Prescribes air traffic control procedures and phraseology for use by persons providing air traffic control services.

FAAO 7210.3 – *Facility Operation and Management* – Provides instructions, standards, and guidance for operating and managing air traffic facilities.

AFI 13-203 - *Air Traffic Control* – Directs the management of US Air Force, AFRC, and ANG air traffic systems, personnel, and facilities. Directs the training of air traffic controllers, the use of equipment, and the operation of control towers and radar facilities.

AF Index 25 - *Air Traffic Control Training Publications* – Provides a reference document and index of Air Traffic Control Computer Based Training products and Air Training Series.

AFI 11-290 - *Cockpit/Crew Resource Management Program* – Establishes requirements for developing and managing tailored, mission specific crew resource management (CRM) training programs. Provides fundamental program principles to functional area requiring cooperative/ interactive time critical efforts.

Other training references include Flight Information Publications (FLIPS), Computer Based Instruction (CBI), Air Training Series, command and local regulations, and other national or mission specific learning requirements to effectively control air traffic.

Career Field Education and Training Plan (CFETP)

Familiarity with the CFETP and the Field Evaluation Questionnaire (FEQ) is the key to conducting a fair and comprehensive appraisal of the quality of formal three-skill level training provided by the AETC technical school. When the CFETP Specialty Training Standard (STS) and the FEQ are properly used, they will serve as a useful tool in determining course deficiencies. Using the guidance provided in the CFETP Part I also ensures individuals receive effective and efficient training at the appropriate point in their career. Be sure the most current CFETP is being utilized or evaluation efforts will be wasted.

The CFETP consists of two parts; both parts of the plan are used by supervisors to control training within the career field.

1. Part I provides information necessary for overall management of the specialty. Section A explains the purpose and use of the CFETP. Section B provides career progression information and specialty descriptions. Section C associates each skill level with specialty qualification (knowledge, training, education, and experience). Section D indicates resource constraints (i.e. funds, manpower, equipment, and facilities) for 3/5/7/9 level formal OJT training. See AFI 36-2108 for job descriptions.

2. Part II, Section A identifies available OJT support materials. Qualification training packages identified in this section have been developed to support both upgrade and qualification training. Section B identifies a training course index that supervisors can use to determine resources available to identify MAJCOM unique training requirements (Section C). Section D contains the course objective list/training standards supervisors will use to determine if airmen have satisfied training requirements. Section E identifies the Specialty Training Standards (STS) which include duties, tasks, technical references, and proficiency codes to support training for all AETC formal courses (resident or correspondence).

Training Review Board

In order to effectively evaluate the CDP, a Training Review Board (TRB) is required by every unit having an air traffic control mission. The Airfield Operations Flight Commander (AOF/CC) is required to convene the monthly TRB to discuss current training programs, status of all trainees, and any trends occurring in the facilities. Board membership, at a minimum, consists of the AOF/CC, AOF/DO, AOF/SO, CCTLR, Airfield Management Training Manager, CATCT, TDSA, CATCA, and the CSE (or designated representative).

From a trainer's perspective, the training review board is an official evaluation of how well training is being conducted. The board membership brings a vast amount of experience cross-functionality to the meeting. The main objective of the TRB is to ensure the host air traffic control facility has the best training program possible. As each individual trainee is discussed, progress and deficient areas are examined to ensure training is being accomplished effectively. If the board identifies problems, corrective actions must be established. If positive trends are noted, trainers and supervisors are commended. Individual trainers may be approached and questioned as to specific training methods if or when this occurs.

REVIEW EXERCISE

1. Who is responsible for preparing air traffic control position certification guides?

2. Training necessary to achieve a higher skill level is _____ while

requires hands-on training to qualify individuals to work a specific duty position.

3. Name four components (or more) of a Controller Development Program.

4. The document explaining air traffic control training within a control facility is _____

5. The acronym ISD stands for _____

6. What principles are used to develop position certification guides?

7. List the three components of a learning objective.

8. What publication lists the duties and responsibilities of an air traffic controller?

9. What regulation defines to the trainer what computer based training (CBT) products are available?

10. The Specialty Training Standard is found in Part II of the

11. What document must be used (when available) to evaluate the knowledge level of a new three level?

SECTION TWO

TRAINING QUALIFICATIONS AND RESPONSIBILITIES

“ I can teach you to dance, but you’ll have to hear the music.” - Carl Hamerschlag

Objective

To complete this section of instruction, the following objective must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is two days or four hours.

Task	References	Objective
2c Trainer Qualifications and Responsibilities	AFI 36-2201, Chap 4; AFI 13-203, Chap 6; AT-M-01; CDP OI	Explain what personal and regulatory qualifications are necessary to be a trainer. Explain what associated responsibilities are inherent in the job.

Trainer Qualifications

Individuals selected as air traffic control trainers must meet the following qualifications:

- Complete formal Train the Trainer course
- Certified on specific tasks to be trained
- Appointed based on qualifications and experience, not on skill level
- Appointed in writing by the squadron commander (or designated representative)
- Complete AT-M-01

Individuals selected as air traffic control trainers should possess the following personal attributes:

- Motivated toward training
- Operationally and procedurally knowledgeable
- Objective during all facets of training
- Credible
- Possess good human relations and communications skills

Trainer Responsibilities

The trainer is someone who directs growth and prepares others for a test or skill. To become an effective trainer, it is necessary to put into practice the proven principles taught in Basic Training and Professional Military Education (PME) programs and use established ISD guidelines. Managers must ensure they are selecting only the most qualified personnel to perform this critical function. Each individual must also remain current with new procedures in the field and new developments in training methods. The challenge to develop and keep a highly qualified force must be met by managers and trainers alike.

Preparation

The trainer must first obtain the skill, experience, and knowledge to be fully qualified to do the job, then maintain those skills and experiences to be effective. Much of the subject knowledge required to do the

job comes from ATC publications such as FAA orders, AFI's, and facility directives. Once prepared to be an effective trainer, preparation must be accomplished to actually conduct the training. Establish an introduction-briefing checklist. Indoctrinate the trainee about the overall mission and define their role in the mission showing how the training goals will meet the mission goals. Define the overall training goal and guide the trainee in establishing intermediate goals as necessary to achieve a facility rating. Ensure the trainee has the necessary knowledge to work at their assigned position.

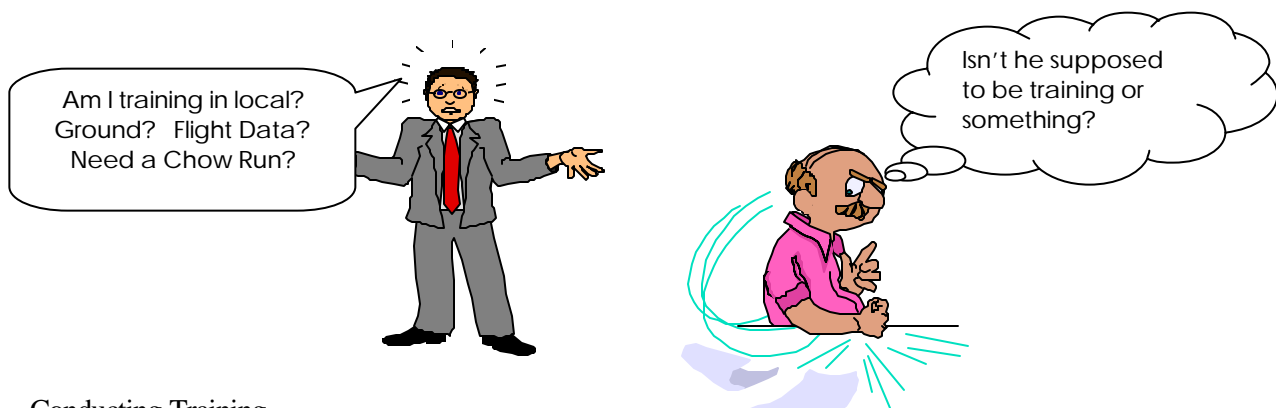
Communicative Skills

To provide hands on task training, as well as subject knowledge training required to perform a task, the trainer must communicate effectively with trainees. In order to communicate effectively, start by getting to know the trainee better. What type of background knowledge does the trainee have? How much education does the trainee have? How much experience does the trainee have? Establishing an effective environment that promotes a personal and professional cross-flow of information allows the trainer and trainee to discuss issues in a forum that will maximize the training effort. It is important for the trainee to have an opinion on training issues that directly affect him/her.

It is imperative to observe trainee feedback. Do this by noting verbal and nonverbal feedback when conducting and reviewing training. Recognize when a trainee begins to ask questions or looks confused.

Planning Training

Effective training does not just happen, it takes a great deal of planning. The supervisor and trainer share this responsibility. Prepare a training schedule or task breakdown to guide the trainee in reaching the desired level of learning and understanding for each task or block of instruction. Utilize position certification guides and lesson plans when accomplishing this objective. Pick two or three tasks in a block of instruction and explain the task objectives and standards to the trainee. Try not to let situations like "We're training in local today" happen. Local control is a very large objective to attempt to train on as a whole. Training objectives should be outlined during the pre-duty familiarization briefing or just before the training session begins. Don't expect the trainee to know what the trainer is thinking.



Conducting Training

Conducting and planning training go hand in hand. Conduct the training just as the trainer and supervisor planned it. Give the trainee a demonstration by allowing them to watch and listen while a specific function is being performed. Have the trainee explain the function in order to assess their understanding. Instruct

the trainee using all available training aids and show how necessary improvements can be made. Provide theory and background information.

Evaluate Training

Evaluate the trainee's effectiveness and ensure that proper feedback is accomplished after each training session. Focus feedback on those task objectives/standards identified with the training during the planning stage. Debrief the trainee on his/her performance on the specific objective including what was accomplished right, what was wrong, what areas need further improvement, and most importantly, a means to improve. Again, stay focused on the training session's objectives, don't jump ahead to more advanced standards in later blocks.

The trainer must be a motivator, coach, and evaluator. Trainers must communicate the correct procedure, knowledge, or technique, and most importantly, the right attitude. Trainers should look at their tasks as one of assisting trainees to learn the job.

Trainee Responsibilities

Just as a trainer has responsibilities towards training, trainees also have responsibilities. If trainees do not meet one or all of their responsibilities, the training session can, and normally will, suffer. As a trainer, ensure trainees understand the importance of adhering to the following responsibilities:

- Develop a working relationship with others
- Complete objectives/assignments within the predetermined time limits either on or off duty
- Arrive each day physically and mentally ready to train
- Strive to learn and progress
- Review and understand certification guide and block requirements, objectives, and standards
- Deal with questions and problems in an objective manner
- Understand the applicable CFETP and JQS requirements and career path
- Give the supervisor/trainer feedback on the training received

Chief Controller (CCTLR) Responsibilities

The CCTLR plays a vital role in the training and development of all air traffic controllers within their facilities. AFI 13-203 outlines regulatory responsibilities levied on CCTLRs although other moral and ethical obligations exist. The CCTLR is responsible to ensure the effective management of manpower and resources assigned to the ATC facility. The CCTLR must ensure the CDP is implemented according to the CDP OI, and revised to reflect any changes in mission and CCTLR requirements.

Watch Supervisor (WS) Responsibilities

The WS is responsible for the overall operation of a control facility during their shift. This includes imbedding crew and individual training requirements into daily operations. The WS affords training opportunities to the trainer by allowing the trainee to work live traffic, allowing the trainer and trainee to conduct training on the Air Traffic Control Training Device (ATCTD) or other training platforms, and by providing time for one-on-one instruction to explain difficult or critical ATC operational regulations.

The relationship between the WS and the trainer is critical if effective training is to be accomplished. The trainer must be aware of the responsibilities and priorities of the WS and support all decisions made regarding how training will be conducted on the crew. The WS has the authority to limit or disapprove air

traffic operations (to include training) based on existing traffic congestion or complexity, staffing, weather, and individual controller training and experience.

REVIEW EXERCISE

1. List four attributes an air traffic control trainer should possess.

2. What is the first and foremost attribute to obtain before becoming a trainer?

3. The effective cross-flow of information between the trainer and trainee is an example of

4. Who is responsible for effectively planning a training situation?

5. How often is feedback conducted on a trainee?

6. True or False (circle). A trainer may include an assessment on a performance objective that will be covered later in training on a training evaluation?

7. List four important training responsibilities of the trainee.

8. Who must ensure the Controller Development Program is implemented according to the CDP OI?

9. Who has the authority to limit or increase the amount of training conducted during a particular shift?

SECTION THREE

UNDERSTANDING AND COMMUNICATING WITH TRAINEES

“Do not seek to follow in the footsteps of the wise. Seek what they sought” --BASHO

Objectives

To complete this section of instruction, the following objectives must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is five days or ten hours.

Task	References	Objective
4a Principles of Learning	AFMAN 36-2234, Chap 2; AT-M-01	Explain the purpose of each principle and law of learning. Demonstrate the ability to apply each principle to a training situation. Explain how effective use of learning principles can enhance the training environment with the trainee.
4c Communicating With the Trainee	AT-M-01	Explain the importance of demonstrating effective communications when in a training situation. Demonstrate the use of both verbal and nonverbal skills that enhance the trainee's ability to learn.

To understand what makes your trainee tick and how human needs affect individual accomplishments in training, you should understand several psychological factors. All people are motivated by needs and their behavior. To a great extent, motivation is based on satisfying these needs. Dr. Abraham Maslow proposed that needs can be arranged in *a hierarchy of needs* or motives as follows:

- Physical needs include food, shelter, and clothing. The trainee's pay normally satisfies these needs; however, financial programs have a direct bearing on these needs and if they are experiencing financial difficulty, the trainee's learning ability and behavior will be affected.
- Safety needs include the trainee's need to be free from physical threats or deprivation.
- Social needs include the need to be accepted as part of the team.
- Ego needs include the need for self-esteem, recognition, and status. This need is satisfied, to some extent, by upgrading, PME completion, and promotion.
- Self-fulfillment needs are only obtained by a few people. This level includes creativity and self-realization.

Figure 3-1 illustrates how personal needs are dependent upon each other. For example, if an individual is having financial problems and is unable to support their lifestyle or family appropriately, each need listed above that can not be satisfied. Air Force programs are founded in providing individuals their basic needs through pay and incentives, and most often are able to provide most safety needs to individuals and

families. If the trainee is not able to satisfy the two lower need levels prior to training, training will not be effective.



In the event an individual is having financial problems or situations involving emotional or physical security, remember to refer them to the appropriate person or agency. Discreetly inform the CCTLR/supervisor of the situation so a proper evaluation can be completed.

Human Motivation

Human beings generally direct activities towards the satisfaction of physical wants and well-being, behave in ways that will lead to success and achievement or gaining recognition, admiration and respect, act in ways that lead to feeling wanted, and act in ways to bring security and release from worry and anxiety.

Psychologists report that learning has occurred when there are changes in an individual's physical behavior or manner of perceiving and thinking. Motivation, the force that moves a person towards a goal, is the trainer's most effective tool in encouraging trainees to learn. The need for security, new experiences, recognition, self-esteem, conformity and consideration for others are all motivators.

The trainer must recognize these needs and satisfy them through instruction. The trainer must create a desire to learn in the trainee and they must feel there is a need or reason to learn. A simple explanation of training objectives and how these objectives fit into the overall picture will help. Trainees must know what is expected of them and why.

All learning stems from experiences. No two people have had the same exact experience. Therefore, to be effective, the trainer must vary each training situation so that it is meaningful to each trainee. You must adjust to the trainee, don't make them adjust to you. Learning committed to memory alone is not as effective as that involving actual performance or hands-on training. The trainee must become involved in each learning situation. (Complete the Learning Style Inventory at the end of this section).

The Learning Style Inventory at the end of this section serves a twofold purpose. First it allows the readers of this package to explore their own learning personality. The results are by no way definitive, only providing the individual a broad overview of probable learning preferences. The Learning Style Inventory can also be used as a introductory tool between the trainer and the trainee. In a normal course of air traffic control training, it can take months for trainers to learn meaningful characteristics about the trainee. This learning forum can open up discussion between the two and set a foundation for future communication. The Learning Style Inventory is not intended to establish a training plan for an individual, crew, or facility. Its intentions are strictly informational and meant to stimulate the trainee and trainer to think about the differences in the way people learn and the way people train.

Laws of Learning

The ability for a person to learn is based on many different personal and professional preferences. The next section of AT-M-01 discusses many theories and strategies, personal evaluation, and motivation. From an operational perspective, the trainer can set up an atmosphere that will motivate the trainee to learn. Through utilization of the results of the Learning Style Inventory and the Laws of Learning stated below, the trainer should have a firm grasp on what type of learning atmosphere the trainee requires and what learning stimuli is required to motivate the individual to learn.

- The Law of Readiness - When people feel ready to act or learn, they act or learn more effectively. Trainees are ready to learn when they feel a need or desire to master the lesson and feel annoyed if prevented from doing so. In this state of readiness or frame of mind, trainees are not easily distracted by other stimuli.
- The Law of Effect - Simply stated, you can catch more flies with honey than with vinegar. People learn better in pleasant surroundings. Conversely, an attitude of fear, gruffness, and unpleasantness will interfere with learning.
- The Law of Exercise or Repetition - Defined as "the more often activity is repeated, the more likely it is to be learned". The drill should be as much like the actual task as possible. The moral of this law is simple, do not assume, because you have stated some facts to the trainee, that these facts are automatically learned and remembered. Instead, restate and summarize them.
- The Law of Recency - The more fresh and recent a subject, the more we remember about it.
- The Law of Intensity - The more vivid a learning experience, the better it will be learned.
- The Law of Learning By Doing - This may be the most important law of all. If you want to learn how to thoroughly accomplish a task then you should do it and continue to do it

repeatedly. This kind of learning will provide faster, more effective results for you than the most brilliant lecture.

Principles of Learning

In any training environment, specific principles of learning are always applicable.

- After maturity is reached, learning ability remains practically constant
- Learning requires activity and is based on past experiences
- Extreme emotional responses interfere with effective learning
- Interest is essential to effective learning
- Early success increases the chance for effective learning (known to unknown)
- Friendly competition and challenging problems stimulate learning
- Knowledge of the purpose, use, and application of things make learning more effective
- Knowledge of the standards required makes learning more effective
- Continuous evaluation is required for effective learning
- Recognition and credit provide strong incentives for learning
- The more vivid and intense the impression, the greater the chances for remembering
- Things should be taught the way they are to be used
- Effective learning will occur when a logical relationship exists between things being taught
- Effective learning occurs when initial learning is followed immediately by application
- Repetition, accompanied by constant effort toward improvement, makes for effective development of skill
- People learn more when they are made to feel responsible for learning

Communication

One of a trainer's most important assets is the ability to communicate effectively. For a trainer to evaluate what type of instruction is most effective and what learning behavior is most favorable, communication must occur. This includes the ability to be understood. The three basic elements of the communication process are source, symbol, and receiver.

- Source - The source is the trainer and how well the message is transmitted.
- Symbols - The symbols are words, common gestures, and/or facial expressions such as the pointing of a finger or a frown.
- Receiver - The receiver is the individual the trainer is trying to communicate with, the trainee.

One of the best ways to understand a trainee is to listen to what they have to say. It is a must in the communication process. Hearing only what is said is not listening. A trainer must understand the communication and sustain concentration. A good trainer should not permit emotional blocks or physical distractions to come between the trainer and the communicator.

To be a good trainer requires continual self-analysis. Not all trainees will react the same, and each one will require an adjustment by the trainer, not only in training methods, but also in approach. Each trainee will gain knowledge that can be applied in other training situations. The trainer must remember that they

are dealing with human beings who have emotions and feelings. Remember that an individual's psychological state has a great deal to do with their ability to learn and progress. If the trainee has a problem, the trainer should do what they can to help. If the trainer is unable to assist, elevate the problem to someone that can help.

REVIEW EXERCISE

1. Dr. Abraham Maslow explains personal needs and how they affect a trainee's ability to learn. This theory is known as Maslow's _____.
2. According to Maslow, what 'needs' have to met before an individual can truly become a team player?

3. How should a trainer react when a trainee expresses deep emotional problems that hamper training?

4. What is the force that moves a person towards a goal, such as learning how to be an effective air traffic controller?

5. True or False (Circle One). Most individuals enter the learning environment with relatively the same background and experience.
6. The Law of _____ states that a person will learn a subject if the activity is continually repeated.
7. The Law of _____ implies that a trainer should create a pleasant learning atmosphere where the trainee is at ease.
8. According to the principles of learning, friendly competition and challenging problems do what to the learning environment?

9. List the three basic elements of the communications process.

10. Emotional blocks and physical distracters often impede the trainer's ability to

Learning Style Inventory

The following seven pages represent a learning inventory that will allow the trainer to become familiar with different learning capabilities. Answer each question truthfully. Tally your scores on the seventh page, and relay them onto the chart on the eighth page. This is not meant to be a measurement device that categorizes learners into one learning style only. It is designed to make the individual aware of the different types of learning styles and how different individuals have varied learning styles.

Questions:

1. When I make things as I am learning, I remember the learning better.

Most Like Me

Least Like Me

4 3 2 1

2. Written assignments are easy for me to do.

Most Like Me

Least Like Me

4 3 2 1

3. I learn better if someone reads to me than if I read it silently to myself.

Most Like Me

Least Like Me

4 3 2 1

4. I get more done when I work alone.

Most Like Me

Least Like Me

4 3 2 1

5. I remember what I have read better than what I've heard.

Most Like Me

Least Like Me

4 3 2 1

6. When I answer questions, I can say the answer better than I can write it.

Most Like Me

Least Like Me

4 3 2 1

7. When I do math problems in my head, I say numbers to myself.

Most Like Me

Least Like Me

4 3 2 1

8. If I need help in learning, I will ask a coworker for help.

Most Like Me

Least Like Me

4 3 2 1

9. I understand a math problem that is written better than one I hear.

Most Like Me

4

3

2

Least Like Me

1

10. I don't mind doing written assignments.

Most Like Me

4

3

2

Least Like Me

1

11. I remember what I hear better than what I read.

Most Like Me

4

3

2

Least Like Me

1

12. I like to work by myself.

Most Like Me

4

3

2

Least Like Me

1

13. I would rather read a story than listen to it read.

Most Like Me

4

3

2

Least Like Me

1

14. I would rather show and explain how a thing works than write about how it works.

Most Like Me

4

3

2

Least Like Me

1

15. Saying something over and over helps me remember it better than writing it over and over.

Most Like Me

4

3

2

Least Like Me

1

16. I like to work in a group because I learn from others in my group.

Most Like Me

4

3

2

Least Like Me

1

17. When someone says a number, I don't really understand it until I see it written.

Most Like Me

4

3

2

Least Like Me

1

18. Writing a word several times helps me remember it better.

Most Like Me

4

3

2

Least Like Me

1

19. I find it easier to remember what I have heard than what I have read.

Most Like Me

4

3

2

Least Like Me

1

20. I learn best when I study alone.

Most Like Me

4

3

2

Least Like Me

1

21. When I have a choice between listening and reading, I usually read.

Most Like Me

4

3

2

Least Like Me

1

22. I feel I speak “smarter” than I write.

Most Like Me

4

3

2

Least Like Me

1

23. When I’m told pages to refer to, I can remember them without writing them down.

Most Like Me

4

3

2

Least Like Me

1

24. I get more work done when I work with someone.

Most Like Me

4

3

2

Least Like Me

1

25. Written math problems are easier for me to solve than spoken ones.

Most Like Me

4

3

2

Least Like Me

1

26. I like to do things with my hands, like repairs or crafts.

Most Like Me

4

3

2

Least Like Me

1

27. The things I write down sound better if I say them.

Most Like Me

4

3

2

Least Like Me

1

28. I study best when no one is around to talk or listen to.

Most Like Me

4

3

2

Least Like Me

1

29. I do well learning when most of the information has to be read.

Most Like Me

4

3

2

Least Like Me

1

30. If learning or work assignments were oral, I would find it easier to do.

Most Like Me

Least Like Me

4

3

2

1

31. When I do a written math problem, I say it to myself to understand it better.

Most Like Me

Least Like Me

4

3

2

1

32. I can learn more about a subject if I am with a small group.

Most Like Me

Least Like Me

4

3

2

1

33. Seeing a number makes more sense to me than hearing a number.

Most Like Me

Least Like Me

4

3

2

1

34. I like to make things with my hands.

Most Like Me

Least Like Me

4

3

2

1

35. I like tests that ask me to complete a sentence or write down the answers.

Most Like Me

Least Like Me

4

3

2

1

36. I understand more from a discussion than from reading about a subject.

Most Like Me

Least Like Me

4

3

2

1

37. I learn better by reading than by listening.

Most Like Me

Least Like Me

4

3

2

1

38. I would rather tell a story than write it.

Most Like Me

Least Like Me

4

3

2

1

39. I find it easier to work out a math problem when I say the numbers to myself.

Most Like Me

Least Like Me

4

3

2

1

40. I like to study with other people.

Most Like Me

Least Like Me

4

3

2

1

41. Seeing the price of something written down is easier for me to understand than having someone tell me the price.

Most Like Me

4

3

2

Least Like Me

1

42. I understand what I have learned better when I am involved in making something for the assignment.

Most Like Me

4

3

2

Least Like Me

1

43. The things I write down on paper sound better than when I talk about them.

Most Like Me

4

3

2

Least Like Me

1

44. I do well on tests if they are about things I have heard about.

Most Like Me

4

3

2

Least Like Me

1

45. I can't think as well when I work with someone else as when I work alone.

Most Like Me

4

3

2

Least Like Me

1

LEARNING STYLES INVENTORY WORKSHEET

Transcribe the answer from the inventory to the corresponding number. Then shade in same area on next page.

VISUAL LANGUAGE

5 _____
13 _____
21 _____
29 _____
37 _____

Total _____ x 2 = _____

VISUAL NUMERICAL

9 _____
17 _____
25 _____
33 _____
41 _____

Total _____ x 2 = _____

AUDITORY LANGUAGE

3 _____
11 _____
19 _____
36 _____
44 _____

Total _____ x 2 = _____

AUDITORY NUMERICAL

7 _____
15 _____
23 _____
31 _____
39 _____

Total _____ x 2 = _____

AUDITORY - VISUAL - KINESTHETIC

1 _____
18 _____
26 _____
34 _____
42 _____

Total _____ x 2 = _____

INDIVIDUAL LEARNER

4 _____
12 _____
20 _____
28 _____
45 _____

Total _____ x 2 = _____

GROUP LEARNER

8 _____
16 _____
24 _____
32 _____
40 _____

Total _____ x 2 = _____

EXPRESSIVENESS - ORAL

6 _____
14 _____
22 _____
30 _____
38 _____

Total _____ x 2 = _____

EXPRESSIVENESS - WRITTEN

2 _____
10 _____
27 _____
35 _____
43 _____

Total _____ x 2 = _____

LEARNING STYLES PROFILE

Seeing words on books, charts, etc. (Visual Language)																														
Seeing numbers rather than hearing (Visual Numerical)																														
Hearing spoken words (Auditory Learner)																														
Hearing numbers explained (Auditory Numerical)																														
Handle, touch, feel while learning (Auditory-Visual-Kinesthetic)																														
Learn better by yourself (Individual Learner)																														
Learn better in groups (Group Learner)																														
Like to talk to tell what you learned (Expressiveness-Oral)																														
Like to write to tell what you learned (Expressiveness-Written)																														
	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Not so hot - You learn better with

O.K. You can learn using this way

Best

Learning Style

other styles

SECTION FOUR

THE KEYS TO ADULT LEARNING: THEORY AND PRACTICAL STRATEGIES

“The more you know the less you understand” --Tao Te Ching

Most of us have a picture of how to teach children. After all, we were all children at one time and have many memories of how teachers, good and bad, conducted their classes. From this experience we have some ideas of how to proceed, even if the details are fuzzy.

But when it comes to teaching adults, we are not as sure. Reflective educators will question whether the teaching methods and techniques appropriate for children make sense for adults. A classroom of children is in the same age and developmental cohort, but adults show much more diversity. Training adults may require a different teacher-student relationship. Unlike children, adults have a great deal of knowledge and life experience. How is learning facilitated when the students and the teachers are social and intellectual equals? And finally, adult learning seems so varied – on-the-job training, off duty education, PME course work – that the teacher of adults may wonder if there are any basic principles and concepts that can be used to facilitate adult learning with all of its different settings and audiences.

Objectives

To complete this section of instruction, the following objectives must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is five days or ten hours.

Task	References	Objective
4b Adult Learning Strategies	AT-M-01	Explain how adults learn and how the adult learning environment differs from that of children.
4d Understanding Trainee Attitude and Behavior	AT-M-01	Explain how adult attitudes and behaviors change as young individuals enter the military. Discuss each key to adult learning with the trainer or supervisor.

Characteristics of Adult Learners

Every military member is considered an adult learner. At first it may seem easy to distinguish an adult learner from a younger learner – just look at the difference in years. But the difference goes beyond age and years. Think for a moment about adulthood. What makes an adult different from a child? We know that adults are older than children, they have responsibilities in their work, families, and community, which children do not have, and that they are in charge of their lives. Adults are defined by legal descriptions, i.e., voting age, drinking age, by the roles they take on, by the life tasks they have. Perhaps more important for our purposes, adults are capable of complex conscious processes. They have the capacity to grow and develop beyond the physical dimensions associated with growth in childhood. In what ways are you different from when you were a child or a teenager?

Adults participate in a great variety of educational activities, from formalized college classes to self initiated learning events. What are some of the common characteristics of adult learners? As an adult learner how would you characterize yourself?

- Adults have many roles and responsibilities in their lives, training for occupational advancement being only one, and sometimes not the major task at the time of its undertaking. In contrast, children and youth have education as their major responsibility.
- Adults are usually motivated by a pragmatic desire to immediately use or apply their knowledge. As children, we learn information and skills that apply over the years, preparing us for our future adult roles.
- Adults often have their learning abilities effected by a transitional event in their lives. Events such as divorce, moving, and financial problems can be cited as reasons for impaired learning. Children and youth have a formalized education plan that proceeds without much influence from transitions in their lives.

Malcolm Knowles (1980) specifically cited four assumptions about adult learners that place them apart from children and youth. He characterized adult learners as:

- having a self-concept which moves from being one of a dependent personality toward being a self-directed human being.
- accumulating a growing reservoir of experience that becomes an increasingly rich resource for learning.
- orienting their readiness to learn to developmental tasks of their social roles.
- changing their perspective from one which postpones the application of knowledge to one which sees the immediacy of knowledge application.

What do these characteristics mean for the task of working with adult trainees? They mean that we must understand the unique character of adults. Trainees are a very diverse group of adults. They come to work with a variety of backgrounds, educational experiences, expectations, and inhibitions. As an adult trainer, close attention must be paid to the trainees' needs. Adult learners, for the most part, have a wealth of experiences and expertise, and are interested in being treated with the respect associated with adulthood. Through whatever window adults are viewed as learners, they are different and they learn differently.

Styles of Adult Learning

There are many ways people can learn. Each person has their own "style" which produces results for them. Think about the way you learn. What makes it happen for you? How would you describe your learning style? Do you like to learn in a group setting, or sitting alone poring over an operating instruction or regulation? Is seeing the way something works important to you? Is reading about a topic enough for you, or do you need to see and hear a demonstration on it? Do you break your information down into

many separate entities, or do you need to see the big picture first? How do you personally learn best? Refer to the results of the first learning inventory.

Each of us is an individual, with a particular personality and learning style. Over the years we have found successful ways to facilitate our own learning. We become quickly aware when a training situation is presenting information in a way that is hard for us. When the trainer is unaware of this dilemma, or it is purposely overlooked, the training situation becomes ineffective.

Adult learners may not be conscious of their individual style. They may know that a method works or doesn't work for them, but they may not know why. As we begin to work with adult trainees, it is important to help them come to know their personal learning style. In getting to know them we can assess their learning style, determine what is comfortable for them, and incorporate methodology which will take advantage of their style.

One useful way to conceptualize the idea of different learning styles comes from the Myers-Briggs Personality Type Indicator. This instrument characterizes a person's personality type in terms of the way that they learn, conceptualize information, make decisions, and perceive the world. The Myers-Briggs inventory produces 16 types of learners, depending on how a person scores on the continua for four dimensions: introversion-extroversion, sensing-intuition, thinking-feeling, and judging-perceiving.

- **Introversion-Extroversion** - a preference for dealing with the inner world of ideas or the outer world of people and things
- **Sensing-Intuition** - a preference for taking in information through the five senses or for relying on "gut feelings" and the possibilities of the situation
- **Thinking-Feeling** - a preference for making decisions impersonally based on analysis and principle, or personally based on liking and disliking, on values and the impact of the decision on people
- **Judging-Perceiving** - a preference for coming to final conclusions or continually taking in information

This popular instrument has been widely used in career development, counseling, staff development, and training and education. Its results can make us aware of our own styles, how we operate, and how we learn. This can be reaffirming in that we recognize our own uniqueness, our capacity to learn, and that there is no "right" way to learn. (Complete the Myers-Briggs Personality Type Indicator at the end of this section).

Keys to Facilitating Adult Learning

Thus far, the discussion has been centered on the adult learner and what their individual capabilities and learning differences are. The following five keys to facilitate adult learning will provide the bridge between theory and practice.

Key One - Understand and Reduce Anxiety

Have you ever walked into a seminar or class and suddenly realized you were remembering those “horror stories” from a previous training or educational experience? This anxiety is typical with adults. As we know from past experience, adults function at a high level in many areas of their daily lives. They are responsible, active and competent. However, entering a training environment may throw them back to an earlier level, and their confidence may deteriorate. Even when an adult is excited about a new educational venture, such as entering into air traffic control training, there may be a sense of uncertainty.

Another anxiety that adults may demonstrate when they first enter a new training program after a period of time is related to their personal expectations. Since they are competent and knowledgeable in other areas of their lives, they may feel that the trainer will expect them to be knowledgeable in this new area. This may be unrealistic, but all the same it may provoke anxiety.

So, adults may feel anxious and insecure as they enter the training program. They may recall those negative classroom memories. They will probably expect the training session to go just like a class they participated in years ago or just recently in technical school. They are starting something new and they may be nervous about what will happen. However, if the training program is designed and developed on the basis of sound adult educational principles, then the experience should be very different for the adult student. It is important to be aware of what the adult brings to the training situation, defuse the anxiety, and help them have realistic expectations.

Practical Strategies. How do you accomplish these objectives? When designing your training situation, be sure to keep anxieties in mind and include time for discussion. Since the training program is not a secret, and since you are interested in having the trainee as an active participant, it is important to include opportunities for information sharing. Here are three strategies that will help reduce anxiety:

- Present the overall agenda at the beginning of upgrade or qualification training and the specific agenda at the beginning of each training scenario. This provides the participant with a clear picture of what will happen and what they can expect. They can then align their expectations with the trainers and, if there is a conflict, it can be acknowledged at the start of the program or class. For task-oriented learners this is very helpful. They can see what the trainer plans to accomplish.
- Take time to describe what will occur during training, both activities and content. Many may enjoy a pleasant surprise, but a training situation is not the place to put people on the spot. Throughout a well-designed program, the trainer may use techniques such as group exercises or role plays, which may make some trainees uncomfortable. Describe these activities and create a climate that is safe for experimenting and risk taking.
- State clearly what is expected from the trainee. Whether it is on the job, in relationships, or in a training environment, people tend to have trouble when expectations are unclear or non-existent. Adult learners want to know what will be expected of them, how they are to respond, what they will need to accomplish, and how the training scenario will be conducted. This is especially true if the adult trainee is only familiar with “traditional” training methods (lecture). They may be expecting to just sit and listen as they have done many times in the past. If the trainer has incorporated “learn-by-doing” experiences, make it clear what the role as a trainer and facilitator are and clarify their role as the trainee.

Key Two - Elicit and Incorporate Expectations

How adult trainees bring their own expectations to a training activity has been discussed in several areas throughout this workbook. Whether those expectations are riddled with anxiety, as explored in the first key, or are simple goals to be accomplished, adults have their own needs and agenda. The first place to start in designing a training scenario is with their needs. It is important to start with **where they are**. Adult trainees want to relate their training immediately to the job and how it fits into their lives. Adults are oriented to relating their training endeavors to developmental tasks and immediate application.

Practical Strategies. The foremost strategy for activating this key is to conduct a needs assessment of the trainee. This can be accomplished informally simply through a discussion with the trainee, where you want to find out about the trainee, who they are and what they want. The training of adult learners is a collaborative, participatory endeavor. It is necessary to know about the participants' goals and expectations when planning methods and avenues of instruction.

- Provide an opportunity at the beginning of the training program for the trainee to share their expectations with the trainer.
- Refer back to these expectations throughout the program to reinforce the immediacy of the training activities. Ask the trainee to share examples of how the content of specific training sessions will relate to their job setting. Eliciting input from the trainee is an excellent way to incorporate their needs and make the information relevant. It also builds confidence.

Working with adult trainees' means being flexible. This is particularly true when incorporating their needs into the program and instruction. When you have gained the confidence in your own ability to read trainees and in letting trainees participate in the program, this strategy will be successful for you and your trainee.

Key Three - Acknowledge and Utilize Experience

Adult trainees have a wealth of experience - take advantage of this rich resource. Don't be threatened by a trainees' level of success and expertise in various areas of their lives. They are trainees in your training program, and they realize that they need to expand their knowledge in this new area of learning. For example, a new seven level trainee arrives at your base. During the first training session, the trainee was asked what experience he/she had in air traffic control. The trainee responded that he/she had worked at two of the busiest airports in the United States Air Force, is tower, RAPCON and GCA certified, and has prior ACATCT, ACSE experience. A normal response might be to think, "Oh no, he/she will know more than me! What can I teach him/her?" A more constructive response would be, "Wow, what a wealth of information and knowledge, how can I utilize this for the benefit of the entire section?" As air traffic control trainers, we feel comfortable with our own abilities in the training environment, we are able to utilize the trainees' experience in a confident and exciting manner.

Training can be a sharing experience, an experience where everyone learns. It is important to remember that adult trainees are not empty vessels that trainers fill up with facts and information; that attitude is not very successful with adults. Of course, adult trainees want information and knowledge when they come to the training session, but that information and knowledge can come from many sources, including the

trainee themselves. Involving trainees in the teaching process can give them a sense of empowerment and can enliven the training experience. Their experience can broaden your repertoire as an instructor.

Key Four - Provide and Encourage Active Participation

Adults are active participants in their daily lives. They have responsibilities in other segments of their lives and are accustomed to self-determination regarding their actions. As discussed earlier in this chapter, adults learn more effectively and efficiently when they actively participate in the training activity. It is important to create an atmosphere that encourages the active involvement of the trainee. Were some of your best learning experiences ones that there was participatory activity?

Practical Strategies. Active participation can be fostered in many ways.

- Plan and design the overall training program with numerous opportunities for trainee involvement. A variety of training methods will not only address the trainees' diverse learning styles, but will make the entire program more interesting. When the content is abstract or difficult to grasp, use numerous illustrations and analogies to make the information more meaningful and concrete. Ask the trainee to contribute their own illustrations and analogies.
- Use discussions, lectures, role-playing (simulate), and practice. A variety of learning activities not only ensures participation, but also maintains interest. We have all been put to sleep during technical school after lunch by a long lecture. Diverse activities keep people involved and interested. Providing variety also helps through the "down" time. An activity which incorporates problem solving, or a lively short video will energize the trainee. Also, thinking back to the discussion of adult learning styles, it is important to have a variety of learning activities to meet the different learning styles of adult trainees.
- Provide opportunities for participant feedback throughout the entire training program. Encourage the trainee to discuss how they feel about the learning process. Ask the trainee to respond after each training session. This will provide valuable information about meeting participant needs and learning styles, and demonstrate your concern for their participation.

Research has shown that adult training and development is best facilitated in a participative environment. This means having a learning climate that encourages and facilitates the active interchange of ideas, content, and experience, and the active involvement of both the trainer and the trainee. Whether designing a one hour training session on typing the daily events log or a one week session on aircraft separation, such an environment can be established. Develop an interactive teaching style, one where there is an interchange of roles between you and the trainee. Foster a positive and open attitude toward trainees' questions and suggestions, one in which their diverse ideas and opinions are encouraged and welcomed. This key, as the others, is grounded in the concept of respect for the trainee as an adult and as a potential contributor to the training process.

Key Five - Identify and Incorporate Relevant Content

Adult trainees want to put their learning to use right away. Is the content of the training situation related to the trainees' current status in the training program? Is the content appropriate to the trainees' level of

experience? Is the instructional methodology appropriate for the content and the trainee's level of experience? Can the trainee use the information in the time frame the trainer expects? These are important considerations. Adult trainees are interested in more immediate application of information than children and teens. With this in mind, make sure program content is on target for trainees.

Practical Strategies. Helpful strategies for implementing relevant content into a training situation are:

- Take the trainees' needs into consideration when planning and designing the training content and instructional methodology. Different trainees require different levels of both.
- Use real examples and refer to real problems and issues from the duty section and from the trainee's own experiences.
- At the end of each training session, have the trainee work on what they will do next (a sort of action plan). How will they take what they have learned and put it to immediate use? What goals will they set for themselves in implementing their learning experience? This process can be helpful for participants in consolidating and assessing their learning. Reflection on one's learning enhances the process and helps in understanding what works within the learning environment.

REVIEW EXERCISE

CRITICAL INCIDENT

Think back over the past few years and the various training and educational activities in which you were a participant. What one activity was the **best** for you?

Describe the activity and its content:

When did it occur?

Who was involved?

What made it the best?

Now think back over that time frame and those activities. Which one was the **worst** training or educational activity for you?

Describe the activity and its content:

When did it occur?

Who was involved?

What made it the worst?

The following questions are designed to stimulate you to think about your personal philosophy in regards to education and training, and how your thoughts and opinions may differ from others in air traffic control.

What priority does your education and training have in your life?

What are some learning characteristics in you that have changed since completing high school?

How would you describe your learning style?

Does your learning style differ from others in your section? If so, how do they differ?

Myers-Briggs Personality Type Indicator

Instructions: To obtain more accurate data regarding your personality temperament, this instrument employs the magnitude scaling technique rather than the more free-choice method. This technique allows you to create your own combination of possible responses to items. A pair of responses follows each statement. However, you are not limited to choosing one response over the other; instead, you can assign points to each response according to how strongly you believe that response applies to you in situations that you have experienced. You have 10 points to divide between each pair of responses.

Example:

Q. In a large group do you more often:

- A. Introduce others 8
- B. Get introduced 2

In this case, the respondent allocated 8 points to A and 2 points to B because she believed that in most situations she introduced others but occasionally she was introduced.

Part I. For each item below, please divide a total of 10 points between the two responses. Allocate more points to the answer that expresses how you feel or act in most situations. Please try to use zeros or tens only if you feel very strongly about a pair of responses. Likewise, please allocate points equally between responses (5-5) only if you strongly believe that each response applies equally well to you.

		Column Number							
		C1	C2	C3	C4	C5	C6	C7	C8
1. Are you more concerned about	A. people's feelings?						5		
	B. people's responsibilities?					5			
2. When you must work with people you have not met before:	A. it requires a good deal of concentration		5						
	B. it generally happens naturally	5							
3. If the situation requires that you follow a schedule, does it:	A. appeal to you?							5	
	B. cramp your style?								5
4. Would others judge you to be:					5				

- A. more abstract?
- B. more concrete?

5. In most situations are you:

- A. rather quiet and reserved?
- B. a good “mixer”?

6. Are you more satisfied with:

- A. organized work?
- B. work with no fixed pattern?

7. Which of these compliments would satisfy you more?

- A. to be a person of feeling?
- B. to be a person of action?

8. Generally, which would describe you best?

- A. more enthusiastic than the average person?
- B. less enthusiastic than the average person?

9. When working with other people, does it appeal more to you:

- A. to solve problems in the accepted way?
- B. to invent new ways to solve problems?

10. Are you more motivated:

- A. when following a carefully worked out plan?
- B. when dealing with the unexpected?

11. Are you more satisfied when working with:

- A. facts?
- B. concepts?

12. Would you prefer to:

	C1	C2	C3	C4	C5	C6	C7	C8
A. more abstract?			<input type="text"/>					
B. more concrete?			<input type="text"/>					
5. In most situations are you:								
A. rather quiet and reserved?	<input type="text"/>	<input type="text"/>						
B. a good “mixer”?	<input type="text"/>							
6. Are you more satisfied with:								
A. organized work?							<input type="text"/>	
B. work with no fixed pattern?								<input type="text"/>
7. Which of these compliments would satisfy you more?								
A. to be a person of feeling?						<input type="text"/>		
B. to be a person of action?					<input type="text"/>			
8. Generally, which would describe you best?								
A. more enthusiastic than the average person?	<input type="text"/>							
B. less enthusiastic than the average person?		<input type="text"/>						
9. When working with other people, does it appeal more to you:								
A. to solve problems in the accepted way?			<input type="text"/>					
B. to invent new ways to solve problems?				<input type="text"/>				
10. Are you more motivated:								
A. when following a carefully worked out plan?							<input type="text"/>	
B. when dealing with the unexpected?								<input type="text"/>
11. Are you more satisfied when working with:								
A. facts?			<input type="text"/>					
B. concepts?				<input type="text"/>				
12. Would you prefer to:								

- A. rely on facts?
- B. consider possibilities?
13. When solving problems do you:
- A. consider the feelings of others?
- B. use logic to arrive at a solution?
14. When you need to accomplish a task do you:
- A. often wait until later?
- B. generally complete it quickly?
15. In most situations are you:
- A. energized through working with others?
- B. somewhat drained after working with others?
16. In critical situations do you need:
- A. to be less sympathetic?
- B. to show much sympathy?
17. Would you rather be taught content:
- A. involving theory?
- B. involving factual information?
18. When you have committed to a group plan it is:
- A. motivating to carry out the plan?
- B. somewhat unpleasant to be tied to the plan?
19. When you work with others, can people determine your interests:
- A. right away?
- B. only after they really get to know you?
20. When unforeseen events occur at work do you:

	C1	C2	C3	C4	C5	C6	C7	C8
A. rely on facts?			<input type="text"/>					
B. consider possibilities?				<input type="text"/>				
13. When solving problems do you:								
A. consider the feelings of others?						<input type="text"/>		
B. use logic to arrive at a solution?					<input type="text"/>			
14. When you need to accomplish a task do you:								
A. often wait until later?								<input type="text"/>
B. generally complete it quickly?							<input type="text"/>	
15. In most situations are you:								
A. energized through working with others?	<input type="text"/>							
B. somewhat drained after working with others?		<input type="text"/>						
16. In critical situations do you need:								
A. to be less sympathetic?					<input type="text"/>			
B. to show much sympathy?						<input type="text"/>		
17. Would you rather be taught content:								
A. involving theory?				<input type="text"/>				
B. involving factual information?			<input type="text"/>					
18. When you have committed to a group plan it is:								
A. motivating to carry out the plan?							<input type="text"/>	
B. somewhat unpleasant to be tied to the plan?								<input type="text"/>
19. When you work with others, can people determine your interests:								
A. right away?	<input type="text"/>							
B. only after they really get to know you?		<input type="text"/>						
20. When unforeseen events occur at work do you:								

Part II. For each item below, please allocate most of your 10 points to the word that appeals to you more often in the following pairs.

	C1	C2	C3	C4	C5	C6	C7	C8
22. A. compassion						<input type="text"/>		
B. accomplishment					<input type="text"/>			<input type="text"/>
23. A. approximate							<input type="text"/>	
B. precise							<input type="text"/>	
24. A. justice					<input type="text"/>			
B. mercy						<input type="text"/>		
25. A. production			<input type="text"/>					
B. design				<input type="text"/>				
26. A. organized							<input type="text"/>	
B. spontaneous								<input type="text"/>
27. A. fair						<input type="text"/>		
B. firm					<input type="text"/>			
28. A. emotions						<input type="text"/>		
B. outcomes					<input type="text"/>			
29. A. depth of concentration		<input type="text"/>						
B. breadth of experience	<input type="text"/>							
30. A. concepts				<input type="text"/>				
B. facts			<input type="text"/>					
31. A. literal			<input type="text"/>					
B. figurative				<input type="text"/>				
32. A. a greeter	<input type="text"/>							
B. a loner		<input type="text"/>						

Column totals for all pages

<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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C8

C1	C2	C3	C4	C5	C6	C7
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SCORING

Step 1. For each of the columns on the four preceding pages, please add the scores in that column for all four pages and place the total in the box at the bottom of the last page.

Step 2. Transfer your scores to the spaces provided below. Then in *each pair*, find the column number for which your score was the highest. Circle the column number and the letter next to it. For example, if your score for column two C2 was higher than for column C1, circle C2---I.

C1_____E

C3_____S

C5_____T

C7_____J

C2_____I

C4_____N

C6_____F

C8_____P

The letters next to each column number you have circled represent your *Situational Temperament*.

Note: If your scores for the two letters of any pair amounted to 40 points each, use the following definitions to decide which letter best applies to you.

Extroversion (E) and Introversion (I). If you believe that your interests flow mainly to the outer world of people and their actions or objectives, circle E. If, however, your interests flow mainly to the inner world of ideas and concepts, circle I.

Sensing (S) and Intuition (N). If you believe that in most situations you attach more importance to concrete realities and direct experience, circle S. If, however, you attach more importance to abstract or inferred meanings or to relationships that you gain from experience, circle N.

Thinking (T) and Feeling (F). If you believe that in most situations you focus more on accomplishing the task than on the feelings of others, circle T. If, however, you attach more importance to the feelings of others, circle F.

Judging (J) and Perceiving (P). If you believe that in most situations you prefer to live in an organized, planned, and predictable world, circle J. If, however, you prefer to live in a changing, more spontaneous, less ordered world, circle P.

From the letters circled above, transfer the letters to the spaces below.

Your situational temperament is _____ (transfer each circled letter)

EXPLANATION

So what does all this mean in the world of the United States Air Force and Air Traffic Control? Well, matching the results from the inventory with the charts on the next two pages will give you an insight into your personality and what characteristics dominate your motivation and behavior. Moreover, it should provoke you to think about others and what is behind their personality and behavior. Not everyone displays the same behaviors and no two personalities are the same. For example, a majority of those established in the United States military display the personality behaviors of an ISTJ, where individuals need everything to be organized to work properly, are eager to take on responsibility, and are loyal and dependable. But this is not inclusive of everyone. Newcomers in the military (most trainees) usually exhibit traits of an INFP, where individuals are usually quiet and reserved, are curious as to what awaits them in the training environment, and display some anxiety in adopting military tradition and procedures into their own value structure.

In the training environment, it is important to know as much about the trainee as possible. The classic expression “personality conflict” becomes very apparent when an overbearing, dominating trainer tries to interface with a quiet and reserved trainee, or even worse, an overbearing, dominating trainee. As displayed in other military awareness programs, such as Equal Opportunity and Treatment seminars, it is imperative to understand the other person. Whether it is in a training environment or a work setting, the more you know, or at least try to know, the better the climate. Think about some of the conflicts you’ve had with peers, subordinates, or supervisors and senior leadership. How often have you said to yourself after the confrontation, “If they only knew me better”, and “I have great intentions”? Or how often have you thought about what makes up the other individual’s personality? Why did they say what they said? Why did they do what they did? The key is to try to learn more about those you work with and for.

Characteristics Frequently Associated with Each Type

ISTJ	ISFJ	INFJ	INTJ
Serious, quiet, earn success by concentration and thoroughness. Practical, orderly, matter of fact, logical, realistic, and dependable. See to it that everything is well organized. Take responsibility. Make up their own minds as to what should be accomplished and work toward it steadily, regardless of protests or distractions.	Quiet, friendly, responsible, and conscientious. Work devotedly to meet their obligations. Lend stability to any group. Thorough, painstaking, accurate. Their interests are usually not technical. Can be patient with necessary details. Loyal, considerate, perceptive, concerned with how other people feel.	Succeed by perseverance, originality, and desire to do whatever is needed or wanted. Put their best efforts into their work. Quietly forceful, conscientious, concerned for others. Respected for their firm principles. Likely to be honored and followed for their clear visions as to how best to serve the common good.	Have original minds and great drive for their own ideas and purposes. Have long-range vision and quickly find meaningful patterns in external events. In fields that appeal to them, they have a fine power to organize a job and carry it through. Skeptical, critical, independent, determined, have high standards of competence and performance.
ISTP	ISFP	INFP	INTP
Cool onlookers - quiet, reserved, observing and analyzing life with detached curiosity and unexpected flashes of original humor. Usually interested in cause and effect, how and why mechanical things work, and in organizing facts using logical principles. Excel at getting to the core of a practical problem and finding the solution.	Retiring, quietly friendly, sensitive, kind, modest about their abilities. Shun disagreements, do not force their opinions or values on others. Usually do not care to lead but are often loyal followers. Often relaxed about getting things done because they enjoy the present moment and do not want to spoil it by undue haste or exertion.	Quiet observers, idealistic, loyal. Important that outer life be congruent with inner values. Curious, quick to see possibilities, often serve as catalysts to implement ideas. Adaptable, flexible, and accepting unless a value is threatened. Want to understand people and ways of fulfilling human potential. Little concern with possessions or surroundings.	Quiet and reserved. Especially enjoy theoretical or scientific pursuits. Like solving problems with logic and analysis. Interested mainly in ideas with little liking for parties or small talk. Tend to have sharply defined interests. Need careers where some strong interest can be used and useful.
ESTP	ESFP	ENFP	ENTP
Good at on-the-spot problem solving. Like action, enjoy whatever comes along. Tend to like mechanical things and sports, with friends on the side. Adaptable, tolerant, pragmatic; focused on getting results. Dislike long explanations. Are best with real things that can be worked, handled, taken apart, and put together.	Outgoing, accepting, friendly, enjoy everything and make things more fun for others by their enjoyment. Like action and making things happen. Know what's going on and join in eagerly. Find remembering facts easier than mastering theories. Are best in situations that need sound and practical ability with people.	Warmly enthusiastic, high spirited, ingenious, imaginative. Able to do almost anything that interests them. Quick with a solution for any difficulty and ready to help anyone with a problem. Often rely on their ability to improvise instead of preparing in advance. Can usually find compelling reasons for whatever they want.	Quick, ingenious, good at many things. Stimulating company, alert and outspoken. May argue for fun on either side of a question. Resourceful in solving new and challenging problems, but may neglect routine assignments. Apt to turn to one interest after another. Skillful in finding reasons for what they want.
ESTJ	ESFJ	ENFJ	ENTJ
Practical, realistic, matter-of-fact, with a natural head for business or mechanics. Not interested in abstract theories; want learning to have direct and immediate application. Like to organize and run activities. Often make good administrators; are decisive,	Warm-hearted, talkative, popular, conscientious, born cooperators, active committee members. Need harmony and may be good at creating it. Always doing something nice for someone. Work best with encouragement and praise. Main interest is in things that	Responsive and responsible. Feel real concern for what others think or want, and try to handle things with due regard for the other's feelings. Can present a proposal or lead a group discussion with ease and tact. Sociable, popular, sympathetic.	Frank, decisive, leaders in activities. Develop and implement comprehensive systems to solve organizational problems. Good in anything that requires reasoning and intelligent talk, such as public speaking. Are usually well

quickly move to implement decisions; take care of routine details.	directly and visibly affect people's lives.	Responsive to praise and criticism. Like to facilitate others and enable people to achieve their potential.	informed and enjoy adding to their fund of knowledge.
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SECTION FIVE

PLANNING AND CONDUCTING ON-THE-JOB-TRAINING

“ What you learn is more important than where you learn it.” - Frank Betances

As originally adopted by the Air Force, the goal of on-the-job training (OJT) was to increase the effectiveness and efficiency of education and training by placing the trainee into the work environment as soon as practical. By eliminating irrelevant information from formal courses while ensuring the student acquired the necessary basic skill, knowledge and attitude to do the job, Air Force OJT provides the highest impact training setting that meets the critical long-term needs.

Objectives

To complete this section of instruction, the following objective must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is two days or four hours.

Task	References	Objective
2a Upgrade, Qualification, Review, Recurring, and On-the-Job Training	AFI 13-203, Chap 6; AFMAN 36-2247, Chap 2; AFI 36-2201, Terms; AT-M-01	Explain each type of Air Force level training and how they apply to air traffic control training. Discuss with the trainer or supervisor how to plan each type of training scenario and the necessary steps involved to prepare the trainee, the training environment, and then actually conduct the training situation.

Types of Training

- On-the-Job Training - Planned training program designed to qualify air traffic controllers through self-study and supervised instruction. The intent is to train all individuals to perform their assigned duties while actually working. Situations that indicate a need for OJT are formal upgrade training to the five- and seven-skill levels, new systems and procedures, and periodic reinforcement of current operating procedures and techniques.
- Advantages of OJT include reducing the cost of training, permitting a trainee to learn from practical experiences, and allowing trainees to learn at their own pace. The trainee usually adjusts to the job quickly, gains confidence, and remains in the production cycle during training.
- Disadvantages of OJT include a degree of reduced services, are time consuming and labor intensive, are normally conducted by skilled personnel with no formal training in instructional methods, and assume that the trainee has the necessary ability to complete the training situation.
- Upgrade Training - Training for the purpose of upgrading to a higher skill level, i.e. 1C131 to 1C151. Upgrade training is part of the concept of on-the-job training.

- Qualification Training - Hands-on performance training designed to qualify a controller in a specific position i.e. previously qualified 5 levels; TERPS, etc. This training occurs both during and after upgrade training. Designed to increase knowledge of skill in particular tasks.
- Review Training - Conducted for the purpose of correcting specific procedural or operational deficiencies detected through performance evaluations, supervisory observations, trends, and operational evaluations. Example: missed proficiency test items.
- Recurring Training - Provided to periodically review selected current operational procedures and techniques. Example: Anti-Hijack, BASH, Aircraft Characteristics, etc.

Though not directly a responsibility of the trainer, the training environment can occur in many different settings. The trainer must adapt to whatever training concept is agreed upon by the CCTLR or CATCT. There are three common methods of conducting training for apprentice controllers. It is important to note that there is no Air Force direction when choosing what method a facility will adopt.

- Assigning the trainee to a working crew with a **designated trainer**. This is the most common method of providing training. The greatest weakness in this method is the strong reliance placed on the trainer to provide all the necessary training. The training administered and the progress of the trainee is a direct reflection of the trainer. If the trainer is sub-par, the trainee's training will suffer. If the trainer is well above average the trainee will excel. This method can be effective under the following conditions:
 - The trainer is highly qualified and motivated toward training.
 - The trainee, trainer, supervisor, CCTLR, CATCT and CSE are involved in establishing and meeting training objectives.
 - The number of apprentice controllers in upgrade training on the crew is such that the trainee can progress through the training program without training interruptions.
- The **training section** method involves a training staff of select controllers, all experienced and motivated towards training. Trainers are responsible for preparing lesson plans, providing classroom training, monitoring the trainee's progress, and reinforcing practical/position training with classroom training. The training section controls the trainee from initial assignment to upgrade.
- The **training crew** method is similar to the training section method except the training crew is also assigned responsibility for a shift in the facility. The training crew normally works days, Monday through Friday, or as aircraft operations dictate. The purpose is to expose trainees to as many available flight operations as possible. When flying is down or limited, the training crew will utilize classroom training and supply one-on-one training as required. After completing the required training on the training crew, the trainee is normally assigned to a regular crew. The training on this crew entails controller proficiency and completion of remaining task items.

When using the training crew or training section method you must establish training requirements, ensure the trainees are assigned a trainer responsible for their training during each phase of training, and ensure the trainers and trainees are thoroughly familiar with the overall training program. The method of training

selected for apprentice controllers will depend on your facility's complexity, manning, hours of operation, and management preferences.

Planning On-the-Job Training

Trainers are not professionally qualified educators; however, they are expected to use certain training methods and techniques that are known to be effective. To properly organize the training setting, the trainer must evaluate which training method he/she will utilize. The type of training method chosen is usually dependent on the topic to be discussed that day, or the number of trainees in the training session. On-the-job training generally involves four instructional methods of presenting new knowledge or practice skills.

- **Lecture Method** - A lecture is useful for imparting information and often the effectiveness is increased when combined with one or more of the other instructional methods. When the training objective is the development of new practical skills, the lecture or telling method alone has limited value.
- **Discussion Method** - Discussion is a valuable training method because it promotes a two-way exchange of ideas. This method may be used in group or individual instruction when the objective is to provide background information or procedures which are common interest to the entire group (i.e. monthly review/recurring training). Questioning is a very useful tool to inform trainees and/or check their retention of the instruction they have received. To help trainees think through logical steps of new tasks, phrase questions so they cannot be answered with a straight yes or no. Use questions which begin with words such as what, who, where, when, why, and/or how. Questioning can be used effectively with all instructional methods. Discussion is critical after each practical training session. Feedback is invaluable.
- **Demonstration Method** - Demonstration or “showing” is most effective when the training objective is the development of new manual skills. It is particularly useful in presenting the various steps of a very long operation that must be performed without stopping. The trainee is taught the additional steps, with the trainer again completing each step of the operation first. In this way, the trainee learns the whole job in small segments. The effectiveness of the demonstration method is increased when it is combined with the discussion method.
- **Performance Method** - Performance is by far the most effective training method. Initially, a person in training should be given a simple job to do such as answering telephones or posting information. After a person has received training on some particular task or phase of work, the trainee should be permitted to perform that task until he/she is able to do it with the desired proficiency. The trainee should then be rotated to another task. With a progressive rotation plan, the trainee grows in skill until he/she is able to effectively perform in a duty position.

Basic principles apply to all training situations. Once the method of instruction has been decided upon, and the training staff has organized itself for effective instruction, the trainee’s instructional needs must now be addressed. Trainers and supervisors should understand and apply certain principles and techniques on how to actually begin and conduct a training scenario. No two trainers will follow the same format when conducting training, though the following points can assist the trainer in effectively planning a learning situation (Refer to Figure 5-1). Remember from previous sections of this guide, not all trainees learn the same, have the same knowledge level, and agree with the trainers training methodology.

- Prepare the training situation - Ensure that the required certification guides, training scenarios, manuals, regulations, handbooks, etc., are available and up-to-date and if training aids are to be used, ensure they are available and in working order. Simulated scenarios are critical and trainers must ensure each scenario meets the training session objective.
- Prepare trainees to receive instruction - Put trainees at ease and help them build confidence. The trainer's efforts are likely to be in vain if the trainee is nervous or ill at ease. Find out what the trainee already knows about the task. Gain the trainee's interest. Explain the task or operation and relate it to the entire control position. Don't have the trainees look at the job backwards or from an angle other than that from which they will be working.
- Present the operations to the trainees - Tell, show, illustrate, and question the trainees. Then, when understood, have the trainees do the job. Give the trainee only a few instructions at one time. Understanding is gained more quickly if ideas are presented gradually. Make key points clear. These make or break the operation. To a large extent, they determine the ultimate success or failure of the training. Use all available training aids; they help to emphasize and clarify key points. Don't use them to fill in time. Before using any training aid, be sure it applies directly to the objective and it works. Don't use irrelevant or broken training aids. If necessary, repeat the operation and explanation.

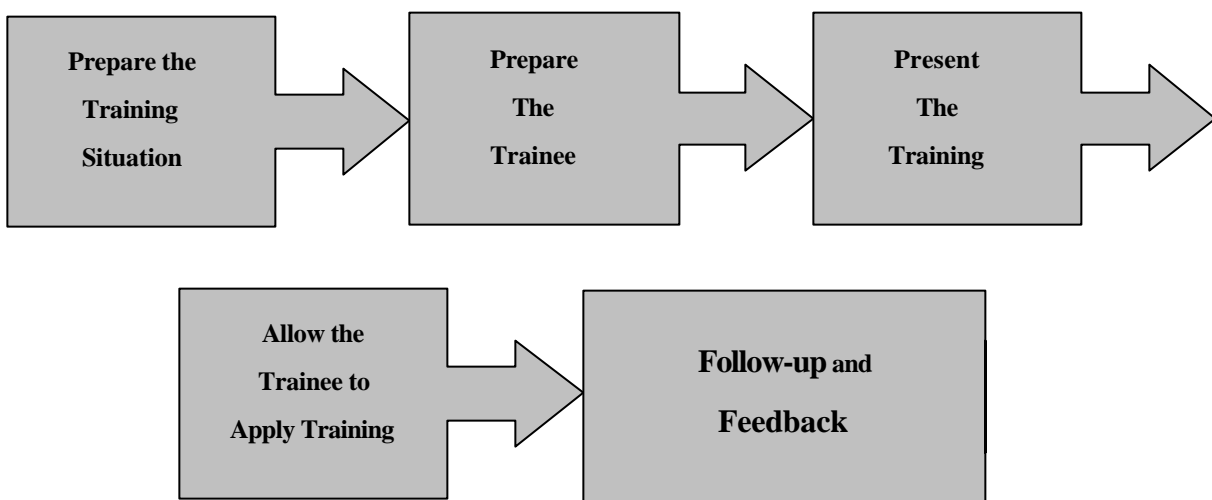


Figure 5-1

- Try out performance - Have trainees do the job under close supervision. Then have them do it again and explain what they are doing and why. Some people don't realize the importance of actions they are observing and repeating. Trainees must understand what they are doing and why. Have trainees explain the key points. Correct errors and omissions in a positive manner and continue to have trainees perform tasks until you know they can accomplish them correctly.
- Follow-up - To the extent possible, with flying safety paramount, let trainees gradually feel they are working on their own so they will get the "feel" of the job by doing it. Be on the look

out for incorrect or unnecessary moves. Expect a few mistakes; if there are none, congratulate the trainees for a job well done. Get the trainees to look for key points as they progress. Taper off the coaching until the trainee is able to work under normal supervision.

The trainer must remember the overall objective is to train trainees for facility ratings and/or upgrade to the next skill level. It serves no purpose to teach irrelevant information (i.e., do not teach apprentice controllers how to conduct meetings or how to develop operating instructions). Stick to the tools of the trade, such as AFI 13-203, FAA publications, letters of agreement, operating instructions, the base flying instruction, etc.

Conducting Training

After proper organization and planning, the trainer is now ready to conduct OJT training. The following principles outline instructional activities that motivate the student to learn while developing a meaningful relationship between the trainee and the material to be taught. Properly sequenced instruction should give the student a roadmap of where they are going and how they are going to get there. Consistency of content ensures that skill progression is orderly and that prerequisite knowledge and skills have been acquired.

- Go from the known to the unknown. Find out what the trainee already knows about the subject and build from there. Sit down with the trainee and quiz him/her orally on the tasks in the certification guide, CFETP, and JQS. Relate the new material to what the trainee already knows. Give the trainee a complete briefing on the overall program and where they fit into it. Acquaint the trainee with expected goals. Make sure the trainee understands his/her part in the organization and that they are a valued member of the team.
- Go from the easy to the difficult. Always begin with the simplest part of the job. The trainee's gained knowledge is used to perform parts of the job after a short practice period. This will give the trainee confidence and inspiration to learn the whole job.
- Teach the task(s) as close to actual job application as possible. For example, if the trainee will be learning how to mark a flight progress strip, do not teach the trainee how to write down the information on a piece of paper; use flight progress strips. Stay focused on the training objective contained in the certification guide.
- Emphasize accuracy and understanding. Speed will come through repetition.
- Clearly define the training objective and let the trainee know what is expected.
- Present new material in short units that can be finished in one session. Short, related training units are not as likely to confuse the trainee.
- Always remember trainees learn best by doing. Put them to work as soon as they understand what there is to do. Give trainees plenty of practice. Simulating scenarios can be an extraordinary aid in reinforcing learned behavior.

- Allow trainees to develop by learning while you guide and help them. Be careful not to dominate, but do not relax your supervision to a point which would allow the trainee to create a hazardous situation. However, give the trainee time, especially during training scenarios (simulation exercises) to assess the situation and resolve conflicts. The trainer must balance when to step in and when to allow the trainee time to see the conflict.
- Recognize the trainee's work and let them know how they are doing.
- Never try to bluff, resort to sarcasm, or ridicule. Always remember that you are trying to develop the trainee's knowledge and expertise. Not impress them with yours.

The best approach to designing the proper size or sequence of instruction is to start with minimal information, and rely on validating how much the trainee learns to show if more instruction is needed to obtain the desired result. This method combined with feedback from training evaluations will provide the trainer with the necessary information on how to deliver training to a particular trainee. If the trainer has provided more instruction than necessary in the beginning, it may be difficult to measure, and hard to revert back to more simple training methods.

REVIEW EXERCISE

1. Review training is conducted to

2. True or False (Circle One). Individuals who have a formal background in instructional methods normally conduct OJT in the United States Air Force.

3. The four types of instructional methods used for air traffic control training are:

4. The most effective training method in air traffic control training is the _____ method.

5. In most ATC facilities, trainees are usually assigned to _____

for the majority of their training experience.

6. What should a trainer do once the training situation has been prepared?

7. Properly sequenced instruction will _____ the trainee and provides a

on where they are going.

8. Beginning instruction starting with the simplest part of the job gives the trainee _____

9. The best approach to training is to start with _____ information.
10. True or False (Circle One). Follow-up sessions and providing feedback on a trainee's progression after each training situation is necessary to let the trainee know how they are doing.

SECTION SIX

AIR TRAFFIC CONTROL TRAINING PROGRAM

Air traffic control training is founded in many diverse training methods, principles, and theories. The main objective is to qualify apprentice personnel to become safe and effective air traffic controllers to support the wartime commitment of the United States Air Force and sustain the National Airspace System. To successfully train individuals to fulfill this commitment, apprentice controllers need to be trained far beyond the minimum level of proficiency. Air traffic control training provides specific skills and knowledge needed to perform at an advanced level so as to entrust the complete safety of Air Force personnel and property.

Objectives

To complete this section of instruction, the following objectives must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is eight days or sixteen hours.

Task	References	Objective
2b (1) Position Certification Training	AFI 13-203, Chap 6; AT-M-01; CDP OI	Explain the process of position certification training in ATC. Describe the different components of position certification training and how to effectively tailor a program to suit an individual trainee. Explain the use of PCG's and how they benefit both the trainer and trainee.
2b (2) Radar Simulator Training	AFI 13-203, Chap 6; CDP OI; ATCTD Manual; AT-M-01; PCG	Explain the purpose of radar simulation training in ATC. Identify how to utilize the ATCTD to include operating the device for different upgrade and qualification scenarios. Demonstrate the ability to plan and conduct training using simulation to a three or five level trainee.
2b (3) Computer Based Training	AFI 13-203, Chap 6; AFIND 25; CDP OI; PCG; AT-M-01	Explain CBT concepts and how it is utilized in ATC. Demonstrate the ability to access the CBT library. Identify each CBT program referenced in the PCG. Plan and conduct a training session using CBT.
2b (4) Non Radar Training	AFI 13-203, Chap 6; ATCTD Manual; AT-M-01; CDP OI; PCG	Explain the purpose and applicability of a non radar training program. Explain how to train from the simple to complex topics both in upgrade and qualification training. Demonstrate the ability to plan and conduct non radar training with a three or five level trainee.
2b (5) Three Level Task Evaluation Procedures	AFI 13-203, Chap 6; AFI 36-2201, Chap 3; AT-M-01; CDP OI; 1C1X1 CFETP; FEQ	Explain three level task evaluation procedures and their importance in ATC. Demonstrate the ability to conduct an evaluation and to recognize a deficient task item. Explain how to report deficiencies to Air Education & Training Command.
1f Field Evaluation Questionnaires	AT-M-01; CDP OI; 1C1X1 CFETP; FEQ	Explain the purpose of an FEQ. Identify the evaluation criteria outlined in the FEQ and display the ability to plan, conduct, and submit the results to the CATCT.
2b (6) Newcomers Indoctrination	AFI 13-203, Chap 6; AT-M-01; AT-M-08;	Explain the different components of the Newcomer's Indoctrination Program. Describe the duties and

	CDP OI	responsibilities of each staff member with emphasis on the trainer's role. Schedule a meeting with the CATCT for a briefing on how the trainer fits into the program.
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Position Certification Training

Position certification training involves training an individual in a specific air traffic control position such as approach, arrival assistant, local, or flight data. At times, it may be called qualification training when an individual is training on a specific position in order to obtain a job skill. For the trainer, position certification training is the primary responsibility, and encompasses utilizing Position Certification Guides (PCG) in order to complete the task.

When initially assigned a trainee for a specific position, the first action should be to interview the trainee and determine the knowledge level of the individual. To accomplish this, conduct an initial task evaluation (see Figure 6-1) by following the PCG, item by item, and verbally asking questions on exactly what they know on the subject matter. The trainer should annotate the proficiency level of each item, and refer to it when conducting position certification training so as not to over-simplify information the trainee already knows. If the task requires the apprentice to perform an item, utilize the ATCTD, static board, or live traffic to evaluate the trainee's performance.

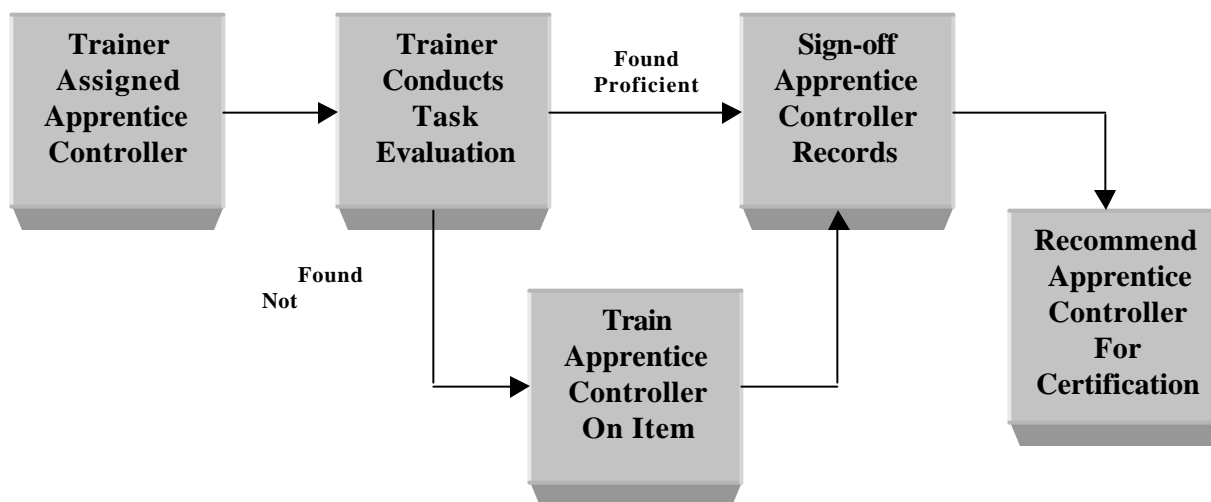


Figure 6-1

If the trainee meets the facility requirements for a specific task, sign the individual off in the Job Qualification Standard. If not, follow the training guidelines outlined in the PCG. Ensure training standards and objectives are met or exceeded when concluding that an apprentice has fulfilled the requirements levied in the position certification guides. As the trainee progresses from one position to another, more task items will be found proficient during the initial task evaluation.

Radar Simulation Training

Radar simulator training is usually conducted on the Air Traffic Control Training Device (ATCTD) (depending on facility equipment), and requires a relationship between trainer, trainee, and the ATCTD administrator. The ATCTD is programmed with specific scenarios that provide the trainer an operational environment that simulates a task item (See Figure 6-2). Most items in the PCG that relate to air traffic control operations will have an associated simulator problem, and provide a written objective and standard for the trainee to complete in order to be deemed proficient.

As part of the initial task evaluation, the trainer must conduct a simulator problem on the trainee to evaluate performance capabilities. AFI 13-203 requires the ATCTD administrator to develop position scenarios to serve as a device to measure standards during initial evaluations. Additionally, trainee controllers (all skill levels) should not control live traffic until completing a comprehensive radar simulator training program for the position in which certification is being accomplished. Exceptions are approved only by the facility CCTLR.

The Air Traffic Control Training Device is designed to give controllers complete instruction in all aspects of air traffic control training. It is comprised of three work stations, each serving independently as a student or pseudo-pilot/instructor position, providing the flexibility to custom configure the system.

SYSTEM FEATURES

Radar Scope Simulation: Components of the display include primary returns, primary weather returns, mapping overlays, and secondary aircraft data blocks. The student may:

- Select radar ranges in increments of 1 mile
- Display either full screen or full panel display mode
- Combine map overlays
- Off-center the radar apex
- Provide for altitude filter selection

Aircraft Simulation: Aircraft movements within the terminal airspace may be manipulated in a variety of ways:

- Simultaneously simulate the flight of a maximum of 1000 aircraft
- Aircraft fly in accordance with realistic aircraft performance information that meets local area requirements.

VFR/IFR: Seven types of VFR aircraft are programmed into different flight scenarios. They include primary only targets, transponder-equipped (with and without Mode C), and do or do not request radar service as they transit the terminal area. VFR aircraft are programmed to make multiple patterns using rectangular or overhead patterns. IFR flights include formation flying (with requests for split-ups), holding pattern requests, and multiple requests for ILS, Visual, VOR, TACAN, PAR, and ASR approaches to two separate airports.

Weather Simulation: The ATCTD is programmed to show realistic simulation of environmental conditions allowing the trainer to select altitude levels, wind direction, and speed. Storm cells of varying intensities, visibility, cloud conditions, temperature, and pressure settings that will affect altitude readings can be selected and controlled by the pseudo pilot.

Flight Progress Simulation: Flight plan information is provided either by printed flight strips or optional secondary electronic display. The display will also show NOTAMS and airfield conditions.

When training on a task item that requires radar simulator training, cover the reference material provided in the PCG first. Allow the trainee to become thoroughly familiar with the core knowledge of a specific topic, then allow them to progress to the simulator. When conducting a simulator training session, explain to the trainee what the scenario is going to cover, what is expected of them, and what will be evaluated during the exercise. Continue to utilize the simulator problem until the trainee has mastered the information. If the need for a more comprehensive scenario is necessary, inform the CATCT and ATCTD administrator to discuss the possibilities.

Computer Based Training (CBT)

Computer based training (CBT) is an individual learning system that utilizes a personal computer for instructional delivery. CBT provides a color graphic, text, and sound presentation of basic air traffic control concepts such as wake turbulence, vectoring, and airspace configurations. The program is managed by Air Force Flight Standards Agency (AFFSA) while the actual CBT products are produced by the Air National Guard (ANG). CBTs are designed to give the trainee or seasoned controller basic air traffic control information that is applicable to all air traffic control agencies.

Each applicable task in a position certification guide will reference a correlating CBT (i.e. CBT A-5, *Non-Radar*). The CBT should be utilized as a supplemental or reinforcement learning tool that allows the apprentice controller to view a topic from a different medium and perspective. It is not intended to be the only reference source on air traffic control information. CBT learning does not require the trainer to be present while the trainee is viewing the presentation, although the trainer must instruct the trainee on how to use the CBT program prior to allowing self-directed learning to occur.

Non-Radar Training

The first duty priority of an air traffic controller is separating aircraft and issuing safety alerts. This applies when the radar equipment is operational and when it is not. It requires a sound working knowledge of the control area and nonradar separation standards. The definition of nonradar is “the separation used when aircraft position information is derived from sources other than radar” or “the spacing of aircraft in accordance with established minima without the use of radar derived vertical, lateral, and longitudinal separation”. As a trainer in a radar environment it is imperative to learn these important elements, apply them to a nonradar environment, and assist others in learning how to control aircraft without the assistance of radar.

Lateral Separation Minima on Diverging Courses

JQS Item: 5p (7)

Reference: FAAO 7110.65, Chapter 5 - Section 5; CBT A-5

Objective: Explain the concept of diverging radials and how minimum separation is achieved. Be familiar with diverging radial charts and how to utilize them in a non-radar environment. Demonstrate the ability to separate aircraft using diverging courses.

Supporting Information: Lateral separation is considered to exist between aircraft established on radials of the same NAVAID that diverge by at least 15 degrees when either aircraft is beyond the airspace to be protected for the other aircraft. [Remember, each aircraft must have at least 4 miles of protected airspace on each side of the aircraft....meaning at least 8 miles separation]

Standard: Effectively separate three aircraft without error.

Figure 6-3

Note: Supporting Information is an ISD technique used in developing lesson plans. It is not a mandatory category in PCG development and used here only in an example format.

Nonradar lessons are addressed in position certification guides (see Figure 6-3) or as a stand-alone program taught after or before an operational position. The CDP OI will outline how the non-radar program is applied in the facility. Before embarking on this training objective, the trainee must read Chapter Six of FAAO 7110.65. Upon completion of any nonradar training program, the trainee will:

- Have a thorough working knowledge of the airspace and control area.
- Have the ability to correctly annotate and sequence flight progress strips.
- Correctly apply vertical, longitudinal, lateral, and initial separation to aircraft.
- Control IFR nonradar traffic throughout the operational control area

Three Level Task Evaluation Training

The purpose of the task evaluation is to evaluate the adequacy of formal training (334th Training Squadron) by comparing what the trainee knows or how they perform to the standards in the Specialty Training Standard (STS) portion of the CFETP. The task evaluation is the only means of feedback the schoolhouse has to assess the graduate's ability after leaving Keesler. It must be conducted on all apprentice controllers prior to beginning any training towards a facility rating. Though it is to be completed by the graduate's immediate supervisor, often the trainer and supervisor are the same.

The task evaluation can be conducted using the Field Evaluation Questionnaire (FEQ) or if one is not received, through a locally developed methodology. Evaluate apprentice controllers according to the 3-level technical school standards outlined in Part II of the CFETP. Though it is important to hold the trainee accountable for the knowledge gained while in technical school, avoid holding the trainee responsible for a knowledge level associated with the five skill level. Discrepancies must be reported through the comment section of the FEQ, or by calling the Customer Service Information Line (CSIL) at Keesler AFB. Ensure the task evaluation is annotated in the trainee's AF Form 623.

Field Evaluation Questionnaire (FEQ)

When evaluating an STS task item the trainer is ensuring the trainee was trained at the AETC technical school to the standard indicated. When a task item is identified as deficient, the item shall then be identified on the FEQ. See AFI 13-203, Chapter 6, AFI 36-2201, Chapter 3 and AFMAN 36-2234, Chapter 7, Section C for additional instructions.

The evaluation begins with a review of the STS and the individual's Student Training Report Card. AETC technical training instructors document each graduate's block performance during their progress through the apprentice course. This AETC form is forwarded to the base Enlisted Specialty Training (EST) manager. The base EST office forwards this AETC Form 156 through the squadron commander, then to the immediate supervisor of the apprentice graduate. Supervisors must ensure the initial evaluation is started on a graduate within 30 days of assignment. A few points to remember are:

1. Evaluate the quality of AETC technical training, not just the individual. It may be difficult to make a distinction between technical training and the individual's abilities.

2. If there appears to be a weak area in AETC training, talk to your other supervisors and interview other 3-skill level graduates. Comparison of experience is a favorable medium from which to judge and draw conclusions.
3. Is the quality of training in the STS unrealistic? If the proficiency standard is, for example, too low, be sure to recommend STS proficiency standard changes. Part II, Section E of the CFETP explains the feedback/recommendation process.

Joint review of the STS with the graduate is a must to determine if all subject areas were adequately covered in technical school. Review each task knowledge and study references to determine if depth and detail of material presented by AETC coincides with the standards in column 3A of the STS. Note any areas that may be lacking, cite specific deficiencies, and write down recommended actions.

Determining the quality of AETC formal training requires not only discussion and questioning of the graduate, but also observation and evaluation of performance. By thoroughly questioning and observing the graduate, the trainer should be able to distinguish training inadequacies from individual shortcomings. Examine AFI 13-203, Chapter 6, AFI 36-2201, Chapter 3, and AFMAN 36-2234, Chapter 7, Section C. Consider the following:

1. Does the graduate have sufficient knowledge to perform at levels required?
2. Can the graduate actually perform to the standard listed in column 3A of the STS?
3. Was training of knowledge tasks compatible with the standards required?

Record all deficient areas for inclusion in the Field Evaluation Questionnaire.

FEQs must be prepared if the graduate does not meet the standards for STS tasks. If a graduate is not required to perform tasks listed in the STS due to equipment outages at the technical school, or if the standards exceed the requirements of the graduate's AFSC, an FEQ must be completed. If the graduate is overtrained, and/or you have recommendations to improve training courses/documentation, respond to the 334th Training Squadron with an FEQ.

The importance of using FEQs, field evaluation visits, and direct correspondence questionnaires to the fullest extent possible cannot be overemphasized. Unless proper feedback is provided, AETC and the Air Traffic Control Air Force Career Field Manager will assume the formal training program meets established standards. If true inadequacies exist in training, it is the first line supervisor, trainer, and most importantly, the trainee who will suffer the effects. The trainer must bring these deficiencies to the attention of your supervisor and CATCT.

Newcomer's Indoctrination Program

The immediate supervisor must prepare for the initial interview/briefing of the trainee (A sample is illustrated in Figure 6-4). Ensure all training materials are on hand (i.e. CFETP, JQS, technical references, trainee's AF Form 623, appropriate certification guide, and any other applicable training documents). The meeting should be conducted in a well lit, quiet room with the trainee's designated trainer present. The initial interview is designed to welcome the trainee, familiarize the trainee with training goals and

rating/certification requirements, and explain how becoming a qualified controller and job expertise relates to promotion.

When beginning the briefing, put the trainee at ease and get to know them. Show a genuine interest in what the trainee is discussing. Explain that proper training and a positive attitude results in a successful training experience. Each supervisor, trainer, and trainee must develop this attitude to be successful.

Review the composition of the Air Traffic Control training program with the trainee. Ask if there are any questions toward any aspect of training. Make sure the trainee understands what is expected of him/her throughout the training process. Finally, document the training meeting on an AF Form 623a or suitable substitute.

Support material is needed at times to help clarify difficult points or to simplify the task being taught. After the lesson plan has been developed, identify the support materials needed (i.e. computer, overhead slides, videotapes, cassette recorders, tests, handouts, regulations, etc.).

Newcomer's Checklist

- Advise the trainee of your expectations and ask their expectations in training.
- Training
 - How will training be conducted?
On-the-job training will incorporate the use of position certification guides, computer based training products, and Air Force/Base instructions. Trainee will gain task proficiency by performing tasks on a routine basis, under the supervision of a trainer and supervisor.
 - Where will training be conducted?
Generally, trainees will receive training in their assigned section, however there may be instances where a trainee will need to attend locally developed courses and lectures (non-radar, etc.). Attendance at these is contingent on individual's qualifications, when they arrive on station. Administrative training may be obtained from support agencies when circumstances dictate.
 - When will training be conducted?
Normally, training on specific requirements will be accomplished during the assigned shift. Training on detailed task requirements may be accomplished during scheduled down times to ensure uninterrupted training. Be prepared to work on your off-duty time.
 - What is the estimated duration of training?
It should take the average trainee (1C1X1) approximately 6 months to become facility rated. The trainee's past experience and abilities are the determining factors in satisfying training requirements. This area is outlined within the certification guides.
- How will performance and knowledge be evaluated?
 - Will be evaluated by reviewing course work, working in position, asking questions about a task
- When will performance and knowledge be evaluated?
 - Will be evaluated on a daily basis. Written evaluations will also be completed.
- Trainer Responsibilities
 - Primary responsibility is to ensure trainee is trained according to job standards.
 - Responsible for monitoring the trainees performance.
 - Ensures work center duty positions qualifications and upgrade requirements are met.
 - Conducts evaluations and certifies and decertifies qualifications.
 - Plans and schedules training and adjusts training plan as required to accomplish training.
 - Documents' training records and seeks assistance from the training manager when needed.
- Trainee Responsibilities
 - Primary responsibility is to obtain and maintain qualifications and skill level.
 - Become a productive team member, learn the assigned training task and develop job knowledge.
 - Understand their role in performing the mission with other units, specialties, and coworkers.

Figure 6-4

REVIEW EXERCISE

1. The first action a trainer should take when entering an apprentice controller into position certification training is to conduct an _____.

2. How does a trainer annotate that a trainee is proficient on a task item during the initial task analysis?

3. What training product provides the trainee with a graphic representation of specific ATC topics?

4. Who can waive the requirement that an apprentice controller must complete a comprehensive radar simulation program prior to working live traffic at a facility.

5. What training program outlines non-radar training procedures?

6. True or False (Circle One). Three level task evaluations are not conducted on re-trainees.

7. How are deficient areas found during a task analysis forwarded to AETC?

8. What is the purpose of a Field Evaluation Questionnaire?

9. Who is responsible for preparing an initial interview for the trainee when first assigned to the crew?

10. List three areas that should be included during an initial interview with a new trainee?

SECTION SEVEN

APPRAISING TRAINEE PERFORMANCE

“Teachers open the door, but you must enter yourself” -- Chinese Proverb

Trainers are constantly required to appraise the progress of trainees and provide feedback on how well they are doing. Studies have shown that when trainers take the time to explain performance standards to a trainee, productivity usually increases. Feedback is primarily geared to improve the trainee’s knowledge level and control abilities, not to focus on past performance and deficient training areas. To be effective, feedback must be clearly stated and the trainer must ensure the trainee understands it.

Objectives

To complete this section of instruction, the following objectives must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is seven days or fourteen hours.

Task	References	Objective
3a Components of an Evaluation 3b Application of Performance Feedback and Evaluation	AFI 13-203, Chap 6; AFMAN 36-2234, Chap 8; AFMAN 36-2247, Chap 5; AT-M-01	Explain what a performance evaluation is and its impact on the training process. Describe the different components of an effective evaluation and what not to do during the evaluation process. Demonstrate the ability to conduct a verbal and written evaluation on an individual after completing a task item in a PCG.
3d ATC Testing and Certification Procedures	AFI 13-203, Chap 6, 7, & 8; AFMAN 36-2234, Chap 5; AT-M-01	Describe the different types of ATC testing. Explain how testing is conducted. Describe ATC certification process.
2e EDIT Procedures	AFI 13-203, Chap 6; CDP OI; AT-M-01	Explain when a trainee may be entered into EDIT status. Explain CCTLR responsibilities during the EDIT process.

Types of Feedback

Verbal feedback is a must in any training environment. Verbal feedback is instantaneous and provides the trainee an immediate overview of how they performed during the training situation. It does not need to be elaborate or in-depth, although it should be specific enough to give the trainee a direction as to what to expect later during a more official performance evaluation. Common courtesy and accepted Air Force communications criteria must be used for an effective verbal feedback session. See Figure 7-1 for specific items to include and not include in a performance appraisal.

Two forms of written feedback are utilized in air traffic control training; AF Form 623a training evaluations and position certifications/facility ratings.

- Training evaluations - You must accomplish written evaluations on all trainees at least twice a month. This is the minimum requirement and evaluations may be conducted more often if needed or directed by the CCTLR. Evaluations are used to appraise the trainees’ progress on

a continuous basis. If trainees experience difficulty in training, the CCTLR will determine if the frequency of evaluations should increase.

- Position certifications – Position certifications are performed by the Chief, Standardization and Evaluation (CSE), or other designated individuals, as an official determination of the level of proficiency the trainee has achieved. The CSE will observe the trainee's performance for a reasonable period of time under normal workload conditions using the standards specified in the certification guide. If successful, the trainee will obtain a position certification or a facility rating.

PERFORMANCE APPRAISAL “DO’S” AND “DO NOTS”

Performance Appraisal Do's

- Reassure the trainee by building on strengths.
- Use a “We” attitude when discussing problems.
- Be specific when discussing performance.
- Keep the interview or critique on track.
- Draw the trainee out by asking thought provoking questions, then listen to the response.
- Listen with warmth, frankness, sincerity, and real interest.
- Talk about job results.
- Function as a coach or facilitator, not as an inspector.
- Close properly, positively.
- Summarize and plan for improvement and changes.
- Write down the results.

Performance Appraisal Do Nots

- Use negative words or too many negative criticisms.
- Use a “You versus Me” attitude.
- Give insincere or excessive praise.
- Use generalities that can not be backed up by specific examples.
- Dominate the conversation.
- Place much emphasis on personality traits.
- Be extremely fussy or seem impatient.
- Be or seem hurried.

Figure 7.1

Components of an Evaluation

The purpose of performing evaluations is to determine trainee progress toward task/block objectives contained in the certification guide, identify level of skill achieved, pinpoint areas needing improvement, identify methods to be used to make improvements, identify strengths, and identify trainee's attitude towards training. There are two styles of evaluating a trainee: subjectively and objectively. The goal of the trainer is to routinely provide an objective evaluation throughout the training process.

- Subjective - This is best defined by the definition of the word: “of, affected by, produced by the mind or a particular state of mind”. A subjective evaluation means the appraisal is influenced by a variety of things (outside influences) such as opinion, no common standard, or the personal feelings of the evaluator that effects their judgments. Examples: controller technique, attitudes, etc.
- Objective - “Being or regarded as being, independent of the mind, real, actual, or without influence.” Trainees are fairly evaluated on their ability to perform the job using a common standard. Clear standards are established in FAA directives, AFI 13-203, Federal Air Regulations, Operating Instructions, certification guides, etc.

In order to increase the credibility of an objective evaluation, evaluate performance against an established standard that is known to the evaluator and trainee, and use well constructed appraisals; instruments such as written tests, oral tests, predictive and/or performance tests. Using a combination of the above will create an effective evaluation that is useful to the trainee (see Figure 7-2). The CATCT and/or CSE will normally have performance objective tests such as block tests available to the trainer or watch supervisor. As a minimum, address the following in every training evaluation:

- Name, inclusive dates of evaluation, and block of training.
- Time spent in each category/block of training (live, simulator or nonpositional)
- Results of previous evaluation’s corrective action.
- Specific tasks covered.
- Status of trainee development. Assess the trainee’s progress, or lack of progress, toward the block objectives. Include deficient areas within the block of training.
- Identify the causes of unsatisfactory progress, if applicable. Be as specific as possible and do not restate the deficient areas only.
- Identify specific action(s) to correct deficient areas or unsatisfactory progress (if applicable).
- Other comments; i.e. interruptions, date identified as “experiencing difficulty in training”.
- Trainee comments, if necessary.

Note: Trainees may have deficient areas and still be progressing satisfactorily. The chief controller must identify trainees who are not progressing satisfactorily as “experiencing difficulty in training” and specify in the training evaluation corrective actions to be taken. The chief controller must also identify when a controller is no longer “experiencing difficulty in training”.

Several rules exist to assist in building an effective evaluation. Planned communication with the trainee helps overcome fear during the actual evaluation.

- Evaluate your own performance - Are you responsible for the trainee’s good or bad performance? Were you a crutch or safety net for the trainee?
- Warm-up period - Take time to develop rapport and discuss the advantages of a periodic evaluation. Set the trainee at ease. Explain the evaluation process, especially standards.
- Be candid and specific - Get right to the point on discussing the trainee’s performance. “Sugar coating” a poor performance will only hurt the trainee in the long run. When you are candid and specific the trainee immediately knows what is expected of him/her.

- Build on strengths – Promote trainee to work toward their greatest potential. Trainees must use their strengths to accomplish the job, not their weaknesses.
- Be a positive listener - Listen with your ears and eyes. Nonverbal communication often says more than words.
- Evaluate the task - Judge the trainee's performance and the results; do not judge the person.

TRAINING EVALUATION		DATE:
NAME: DATE ENTERED TRAINING: POSITION/BLOCK: BLOCK TIME ALLOTTED: TOTAL TIME USED:	<div style="display: flex; justify-content: space-between;"> TODAY TOTAL </div> SIMULATOR: NONPOSITIONAL: LIVE:	
TRAINING OBJECTIVES: <i>Enter the specific training items covered during this reporting period. This should include items specifically addressed in the JQS.</i>		
OBJECTIVES MET: <i>Enter the specific JQS knowledge and skill items that the trainee has mastered during this period. The dates should match the dates entered in the JQS. Address how this training objective was met, i.e. through a detailed question and answer period, by repetitively doing the task, etc. If necessary, explain the level of proficiency the trainee has on a specific training item and recommendations on how to maintain proficiency.</i>		
AREAS REQUIRING CORRECTIVE ACTIONS: <i>Enter any training items that the trainee is showing a continued weakness in, or a training item that needs to be decertified. Be specific as to why the trainee has shown regression or an inability to gain the knowledge to perform this procedure.</i>		
CORRECTIVE ACTION: <i>The trainer must state what actions he/she will take to aid the trainee in overcoming this training deficiency. Again, be specific, and set completion times.</i>		
OTHER COMMENTS: <i>This is an opportunity to address lost training days, trainee attitude, strengths and weaknesses in the trainee, and general comments on how training is progressing.</i>		
TRAINEE COMMENTS: <i>The trainee always has an opportunity to address any topic he/she feels necessary. It can be positive or negative trends in their training, or specific comments related to a specific event.</i>		
TRAINEE:	TRAINER:	SUPERVISOR:

Figure 7-2

Testing and Certification

The primary purpose of testing is to assess the trainee's attainment of the behavior specified in the PCG for a particular objective. Tests also serve as a medium to identify problems or weaknesses in instruction, whether crews are performing up to standards on specific objectives, and to evaluate trainer proficiency. AFI 13-203 charges the CSE to develop and administer all controller proficiency and evaluation instruments, however, it is important for the trainer to be aware of how and why testing tools are developed in the manner they are.

Block, position certification and facility rating examinations are used to evaluate the trainee's mastery of a specific instructional objective. The objective is described in detail in the associated PCG, and the criterion is intended to measure only that which is written. To show that the trainee has attained the objective, they must meet or exceed the standard specified in the objective. Each ATC facility has specific certification processes. Refer to the local CDP OI for unit certification procedures.

Types of Certification Tests

Air traffic control utilizes two types of test measurements to assess a controller's ability: performance and predictive tests. A performance test is one which the apprentice actually performs the skill required to achieve the position certification. Many ATC tasks, especially aircraft separation functions, involve many different capabilities that have to be performed in an integrated manner.

For example, the task of separating arrivals from aircraft conducting IFR pattern operations involves the recall of many procedures (vectoring, speed adjustments, wake turbulence), physical performance of steps (tower/radar coordination system, radios, PIDP), recognition of support materials (AWDS, flight strips), observation of rule use (separation criteria, priorities), and attitudes (safety first). In this type of evaluation, performance cannot be measured by a written test.

If the actual behavior cannot be tested in a performance test, or is a measurement of comprehension, the next best option is to test the apprentice in a written or oral format to determine, or predict, if a certain knowledge level was obtained. For instance, if a trainee can draw every IFR approach to a specific airport, there is a probability that the apprentice can recall the same information when actually controlling live aircraft. It is important to note that tests that do not measure the actual performance of an objective are valid to the extent that they **predict** student performance on the actual task.

Most predictive tests are written tests, oral examinations, and in some cases computer-based instructional tests. The most common type of questions used are multiple-choice; true/false, fill-in-the-blank, essay, short-answer, and matching questions can also be used.

Trainer Developed Testing

In most ATC facilities, the trainer is not responsible to construct block tests for PCG's. However, the trainer may want to develop testing tools to bring the trainee up to a level to successfully complete block test requirements. This can be accomplished by using a number of instructional tools depending on the situation.

One technique utilized by trainers is to instruct the trainee to outline specific task item references. Once completed, the trainer and trainee talk about the outline and add or delete information until it entails all the learning material. The trainer then instructs the apprentice controller to write a sizable (dependent on the amount of information) test (any format) on the required information. The trainer and trainee go over the test verbally, ensure the questions are valid, and then proceed to the next set of objectives. The trainer keeps the test. This process continues until the trainee has completed the entire block of instruction. At this time, the trainer administers the test questions developed throughout the block, and continues the process until the trainee knows all the required information.

Another testing technique is the use of worksheets and diagrams. It is difficult to measure a trainee's knowledge of airspace, approaches, maps, and radio frequencies through performance tests. Supervisors and trainers can develop worksheets that allow the trainee to fill in the blanks, testing the knowledge level of the trainee. It is also common to have trainees draw airspace and/or approaches free hand on a blank piece of paper. The key to this technique is repetition. Conducting this exercise only once before a block test will usually prove disastrous. Have the trainee complete this exercise daily until the worksheets are perfect. Document the results in the AF Form 623.

One final technique is to allow the trainee to re-teach the information in a specific block of instruction back to the trainer. It is a proven instructional practice that when an individual is required to instruct others on a particular subject, they will be more aggressive to learn, and spend more time investigating details on the subject. With this testing scenario, the trainer is able to assess if the trainee covers all the material, can present it logically, and can ask questions if weak areas become apparent.

Evaluation and criticism is a recurrent part of training. As a trainer, you must have the ability to analyze, appraise, and evaluate the performance of trainees. Trainees must have confidence in you before criticism is accepted. A critique is pointless unless trainees profit from it. If trainees have a weakness, provide positive guidance for improvement. Trainers must remain flexible in their approach to each critique, you must remain sensitive to trainee's needs. To dwell on a given criticism too long may have a negative effect. Do not criticize unless you can suggest an improvement. Avoid placing the trainee in a defensive position; take time to explain your criticism objectively.

Skill Checks

The key word in this type of training evaluation is "skill", defined as the ability to perform a job-related activity that contributes to the effective performance of a task. Skills involve physical or manipulative activities that often require knowledge for their execution. All skills are actions having specific requirements for speed, accuracy, or coordination. There are two types of skill-checks that can be performed on air traffic control trainees, the performance skill-check and the certification skill-check.

Performance skill-checks are conducted for a variety of reasons varying from observing that a trainee is progressing way ahead of schedule to being evaluated as EDIT status. The trainee's watch supervisor or a supervisor who maintains familiarity or currency on the operating position conducts performance skill checks. The skill-check is documented by the supervisor on AF Form 623a. Performance skill-checks are used to:

- Compare the knowledge and skill level of a trainee to those required for certification.
- Assist the trainee in performing comfortably with monitors other than their assigned trainer.
- Identify those areas requiring improvement to achieve certification.

The trainee's watch supervisor (or other delegated controller) conducts certification skill-checks. These skill-checks are conducted on tasks trained and signed off on the trainee's JQS or AF Form 797, as appropriate, and documented on the AF Form 623a. The trainee's performance of the knowledge and skills required for certification are assessed through the certification skill-check sessions that may include verbal questioning, simulation, live traffic, or other methods. Remember that skill-checks are not mandatory but are a viable tool when assessing a trainee's performance.

Experiencing Difficulty in Training

It is unrealistic to assume that every trainee who enters the ATC career field will succeed. Even though apprentice controllers may graduate from technical school, it is not a given that the trainee will be successful. The technical school environment is simply a screening tool to determine if the individual has the core capabilities to be a controller. The real proof is when actual on-the-job training begins and the apprentice is required to control real airplanes.

The trainer is the key to a successful training program. But as a trainer, an inherent responsibility is to identify a trainee's deficient knowledge and performance areas. This is achieved by documenting each and every training session on the AF Form 623a. More times than not a trainee will progress satisfactorily within the specified time limits. However, trainees may have deficient areas and still be progressing satisfactorily. A trainee can be identified as "Experiencing Difficulty in Training" (EDIT) for many reasons. The most frequent causes of an individual entering EDIT status are:

- Exceeding block or position certification time limitations set by the CCTLR.
- Inability to comprehend a specific task item within the allotted time limitations.
- Continually decertified on specific task items already trained.

The trainer must be aware not to fall into certain pitfalls of evaluation. The most common pitfall is *evaluator leniency*. The trainer instinctually wants the trainee to be successful. In doing so, the trainer may be hesitant to write an evaluation that has any negative information in it. This practice impedes effective training, wastes valuable resources, and provides the facility chief a deceptive description of the trainee's abilities. Inversely, some trainers tend to consistently write only negative comments, or penalize the trainee for differences in technique. This is commonly known as *evaluator differences*.

EDIT Process

The trainer will be the first person to recognize that an individual is having trouble learning or is unable to grasp the concept of ATC in an operational environment. When this occurs it will usually surface as one of the three examples noted above and annotated in the individuals training records. The AF Form 623 is then forwarded to the CCTLR for review and a decision will be made as to whether the individual will enter EDIT status. If so, the chief controller will counsel the trainee on the decision, and as a result of the interview, may grant up to 100 percent of the original training time for the trainee to learn the information.

The result of the CCTLR decision will be entered into the trainees training records and forwarded back to the trainee with specific instructions. The CCTLR may assign daily evaluations and verbal updates on the trainee's progress. A new crew or trainer may be assigned, or the CCTLR may suggest a specific training method to be emphasized more than others (i.e. intense simulator training). In the event the trainee is unable to accomplish the learning objective within the CCTLR extended time, the individual will be entered into either withdrawal status, or referred to the MAJCOM for a training extension beyond the CCTLRs.

Once it has been determined that a trainee will be withdrawn from the career field, the trainer has completed his/her duties in the training process. The trainee will be submitted for withdrawal under the Failure to Obtain or Maintain Position Certification or Facility Rating (FTOR) category.

REVIEW EXERCISE

1. What are the two forms of written feedback used in air traffic control training?

2. How often, as a minimum, must training evaluations be accomplished in air traffic control training?

3. When injecting your opinion into a performance evaluation, you are evaluating _____.

4. True or False (Circle One). Trainees can not be progressing satisfactorily if they are having difficulty in training or have a training deficiency in a specific area.

5. List four rules to remember when building an effective evaluation.

6. The primary purpose of testing in air traffic control is

7. Name two types of air traffic test measurements.

8. When will a CSE utilize a written test for controller certification?

9. The three most frequent causes of individuals entering EDIT status are

9. The CCTLR may grant a training extension not to exceed _____

of the original training time allotted.

SECTION EIGHT

AIR TRAFFIC CONTROL RATING AND WITHDRAWAL PROCEDURES

Objectives

To complete this section of instruction, the following objectives must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is four days or eight hours.

Task	References	Objective
2d Recommendations for Position Certification/Facility Rating	AFI 13-203, Chap 6, 7, 8, & 9, Atchs 3 - 10; FAR Part 65, Subpart A & B; FAAO 7220.1A, Chap 4 & 5; CDP OI; PCG; AT-M-01	Explain the USAF ATC certification, rating, and withdrawal process. Explain what criteria a controller must complete to be recommended for certification. Explain the different categories of ATC withdrawals. Demonstrate the ability to recommend an apprentice controller for position certification criteria found in the CDP OI.
2f Air Traffic Control Withdrawal Procedures	AFI 13-203, Chap 9 & Atchs 3-10; AT-M-01	Explain the ATC withdrawal process. Discuss each withdrawal category with the trainer.

Air Traffic Control Ratings

An air traffic control facility rating in the USAF means that the individual is qualified to work in every control position in the facility that they are assigned. The trainer is responsible to instruct the apprentice controller on performance standards to obtain each position individually, recommend them for position certification, and move on to the next position. The trainer does not perform any of the evaluations that measure the ability of the trainee to control aircraft in a position. A “check and balance” system is inherent in the ATC system that requires a third party member to evaluate training capabilities.

Facility personnel trained to examine performance and knowledge behavior, and compare those observations with a set of criteria deemed to be the facility standard, conduct ratings and certifications. They include the CSE, Assistant CSE (ACSE), or Chief, ATC Training and Standardization (TSN). Upon completion of the training requirements for each position in the facility, a document is prepared to recommend the individual for certification (refer to CDP OI for recommendation procedures). Recommendations are forwarded through facility staff personnel until they reach the CSE, where arrangements are made for testing and evaluation.

Tower personnel are required to complete certifications in ground control, flight data, and local control prior to facility rating. When completed, the CSE will issue a Temporary Airman Certificate to the certified controller allowing the trainee to work in the facility unmonitored. It will be replaced with a FAA Control Tower Operator (CTO) Certificate upon arrival.

Radar Approach Control (RAPCON) personnel are required to complete certifications in all control positions except Radar Final Control prior to a facility rating. When completed, the CSE will document the type of rating on the rear of the ATCS Certificate that the apprentice was issued upon graduation from

technical school. Additionally, for both Tower and RAPCON facility ratings, the CSE will annotate each position, type facility, and type rating on the individuals AF Form 3622.

ATC Withdrawals

Not every apprentice controller will successfully complete the rigid training standards to become an air traffic controller. As discussed earlier, individuals may be entered into EDIT status when experiencing problems with specific learning objectives or require additional time for seasoning. When the CCTLR has exhausted all available options, or the individual has become disqualified, a withdrawal process begins. The trainer is not responsible for advising the trainee on the pending withdrawal, building the withdrawal package, or acting as the only reference source for withdrawal information. ATC managers are required to identify substandard apprentice controllers to the squadron commander as soon as possible. The commander is responsible for trainee notification, withdrawal actions, and final disposition.

Types of Withdrawal

An apprentice controller can be withdrawn from the career field for reasons other than substandard performance. Other incidents occur that the trainer has no control over. ATC withdrawals fall into many diverse categories:

- **Failure to Obtain (or Maintain) a Rating** – The trainee has failed to meet the standards outlined in the CDP OI, or has failed to maintain the proficiency or ability to control aircraft safely and effectively in a position already rated in. ATC managers may also withdrawal a controller if they are unable to complete the facility's radar simulator program as long as the problems are not more difficult than actual routine traffic.
- **Air Traffic Control Specialists Certificate Withdrawal** – This withdrawal category is utilized when a controller displays a condition that could affect flying safety. An example would be performing in the approach position where an individual's control practices create a hazardous situation. It can be due to one specific incident or a series of unsafe control practices.
- **Drug Use or Abuse** – The use of drugs is very dangerous when mixed with controlling aircraft. The trainer's role in this category is to be aware of any sudden changes in motivation and behavior in the trainee and advise supervisory personnel.
- **Alcohol Abuse** – If a controller, apprentice or journeyman, is involved in an alcohol related incident, it may be grounds for ATCS certificate withdrawal. Each case is evaluated individually by the squadron commander, and a determination whether to allow the controller to return to duty after recommendations are made from base counseling agencies.
- **Character and Behavior Disorder** – This withdrawal rarely affects the ATC trainer. An apprentice may only use this disqualifying factor within six months from the initial oath to enter the Air Force. A disorder is defined as a condition that may be detrimental to the individual's performance of ATC duties and a hazard to flying.
- **Fear of Controlling** – This category is a non-medical term for a simple mindset or phobia that an individual professes a fear of controlling aircraft. It requires the individual to be evaluated by a psychiatrist. In any case, the individual is considered as self-eliminating themselves from the career.

REVIEW EXERCISE

1. Who conducts position certifications and facility ratings?

2. What document is issued to a controller who has just received a control tower rating?

3. What Air Force Form is documented when an individual completes a facility rating in a control tower or a RAPCON?

4. List five types of air traffic control withdrawal.

5. Which withdrawal type does a trainer have the most impact on?

SECTION NINE

AIR TRAFFIC CONTROL TRAINING DOCUMENTATION

Documenting a training session is probably the most difficult task a trainer has, or at least it appears that way in many training programs. You've just completed a training situation, you're tired, you verbally debriefed the trainee, and the last thing you want to do is write an evaluation. On top of that the Chief Controller is constantly looking in the training records only to find missed evaluations. When does it end?

This section of AT-M-01 shows the trainer how to document each phase of training through the use of examples that display a correct way to document all types of training to include the periodic evaluation of position certification training, monthly proficiency studying and training, review training, and JQS completion.

Objectives

To complete this section of instruction, the following objective must be completed with minimal assistance from the trainer. Recommended completion time for this section of instruction is nine days or eighteen hours.

Task	References	Objective
3c AF Form 623 Documentation Procedures	AFI 13-203, Chap 6; AFMAN 36-2247, Chap 5; AFJQS 1C1X1-001 & 002; AF Forms 623a & 1098. CDP OI; PCG; AT-M-01	Explain each heading in a performance evaluation. Explain the different types of training that a trainer is required to document in a trainee's records. Demonstrate the ability to write a proper evaluation using the required format at the unit, annotate monthly and review training, and how to enter and complete a task item in the 1C1X1-001 JQS.

Monthly Proficiency Training

AFI 13-203 requires all ATC personnel to participate in monthly training. Monthly training is the responsibility of the CATCT and the manner that it is administered and recorded is outlined in the CDP OI. Monthly training is considered recurring training, and is required to be annotated on AF Form 1098. (Figure 9-1 is the correct way to annotate monthly training).

TASK OR RECURRING TRAINING AND TECHNICAL REFERENCES	DATE COMPLETED	SIGNATURE OF CERTIFYING OFFICIAL	INITIAL OF TRAINEE	SCORE OR HOURS	TYPE	FRE-QUENCY	DUE DATE
Dec Proficiency Training TR: CATCT Ltr <u>3 Dec 96</u>	15 Dec 96	Frederick P. Morgan	ABS	2+00	SS	M	Jan 97
Dec Proficiency Test	29 Dec 96	Frederick P. Morgan	ABS	100%	W	M	Jan 97

Figure 9-1

The information in *italics* is required to be filled in by ATC personnel. All other information is preprinted on an AF Form 1098 prepared by the CATCT. The December training letter was dated 3 Dec 96 and is listed in the first column of the AF Form 1098. Column two is the date the training or the proficiency test was completed. The certifying official referenced in the third column must be a qualified controller. The certifying official is verifying that training was conducted and the score achieved on the proficiency test. The trainee initials each entry of the AF Form 1098 to verify the accuracy of the information. Proficiency training is also annotated by the number of hours an individual has studied for the test, while proficiency test scores are listed underneath.

Position Evaluations

An evaluation is a judgment expressed as a measure or ranking of trainee achievement progress, or application. As a trainer, it is impossible not to enter subjective data into the evaluation. For example, the trainee met the facility standard outlined in the PCG but was unable to meet the trainer's expectations and standards. A proper evaluation will put subjective information at a minimum, and guide the trainer to evaluate a person on how they are progressing according to written standards.

The most effective means to use when conducting an evaluation is not to wait until the day the evaluation is due to begin the process. By maintaining progress checks and performance data on a daily basis, it is relatively easy to write an objective evaluation that states whether a trainee has met the facility standards or not. Evaluate the entire training period. Don't focus on one specific incident whether good or bad. It may not reflect the overall progress of the individual.

Trainers must accomplish training evaluations at least twice a month to document the trainee's progress toward task/block objectives contained in the certification guide and JQS. Evaluations may be required more frequently as deemed appropriate by the facility CCTLR. Use AF Form 623a or a suitable substitute for all evaluations. As a minimum, address the following in every training evaluation:

- Name, inclusive dates of evaluation, and block of training
- Results of previous evaluation's corrective action
- Specific tasks covered during this evaluation period
- Status of trainee development. Assess the trainee's progress, or lack of progress, toward the JQS objectives. Include deficient areas
- Identify causes of unsatisfactory progress, if applicable. Be specific
- Identify specific actions to correct deficient areas of unsatisfactory progress
- Other comments relevant to the training progress
- Trainee, trainer, CCTLR, CATCT, and AOF/CC signatures

Refer to Figure 9-2 for a detailed example of a training evaluation. It is important to note that written evaluations may take on many forms depending on what is defined in the facility CDP OI.

TRAINING EVALUATION**17-Jun-1999****NAME:** *Smith, Alice B.***TODAY TOTAL****DATE ENTERED TRAINING:****SIMULATOR:****POSITION/BLOCK:****NONPOSITIONAL:****BLOCK TIME ALLOTTED:****LIVE:****TOTAL TIME USED:****DATE ENTERED TRAINING:** *11 Jun 99***TRAINING OBJECTIVES:** *JQS items 2l Primary Crash Phone; 4b Operate Primary Crash Phone***OBJECTIVES MET:**

JQS items 2l and 4b - Amn Smith was initially assigned to study AFI 13-203 and Local AFBI 13-203 to learn the basic concepts behind the primary crash net. A detailed discussion was completed immediately after where specific questions were answered as to why the primary crash is utilized. I provided Amn Smith three scenarios where the crash phone would be utilized and performed a simulated daily check. Then she was allowed to practice on the same simulated exercises, allowing her to refine her phraseology and abilities to pass information.

AREAS REQUIRING CORRECTIVE ACTION:

JQS item 4b - Amn Smith was given the same training sequence as referred to in the above scenario but was unable to operate the primary crash phone properly. She is proficient on the procedures and of the agencies on the crash phone, but was unable to accomplish the daily check in a clear and concise manner. She appeared very nervous, which hindered her ability to utilize the correct phraseology.

CORRECTIVE ACTION:

Amn Smith will continue to practice simulated primary crash phone activations until she is capable of completing the daily check and pass information without error.

OTHER COMMENTS:

Amn Smith's attitude remains positive as she aggressively accomplishes all assignments given to her. Her ability to read, discuss, then completely understand a training topic will assure minimum training time in this position. Periodically, she appears nervous, especially when she is required to communicate with another agency. Amn Smith lost two training days this reporting period due to bay orderly duties.

Review Training

Review training is conducted for the purpose of correcting specific operational deficiencies detected through performance evaluations, supervisory observations, trends, or operational evaluations. The purpose of this example is to correct missed items on monthly proficiency tests. Review training is mandatory for anyone who scores less than 100% on the monthly proficiency test. Refer to the Figure 9-3 on how to annotate review training on AF Form 1098.

TASK OR RECURRING TRAINING AND TECHNICAL REFERENCES	DATE COMPLETED	SIGNATURE OF CERTIFYING OFFICIAL	INITIAL OF TRAINEE	SCORE OR HOURS	TYPE	FRE-QUENCY	DUE DATE
Dec Proficiency Training TR: CATCT Ltr 3 Dec 96	15 Dec 96	Frederick P. Morgan	ABS	2+00	SS	M	Jan 97
Dec Proficiency Test	29 Dec 96	Frederick P. Morgan	ABS	67%	W	M	Jan 97
Dec Review Training (if applicable)	2 Jan 97	Frederick P. Morgan	ABS	1+30	SS	M	Jan 97
Dec Proficiency Retest (if applicable)	5 Jan 97	Frederick P. Morgan	ABS	100%	W	M	Jan 97

Figure 9-3

JQS Task Completion

The JQS (refer to Figure 9-4) identifies training references and minimum core task requirements for the ATC Operations specialty. Each item listed in the AFJQS is required training at all Air Force installations for the facility indicated unless the item has a # symbol beside it in the master AFJQS. If so the item has been deferred at that facility. CCTLRs may defer training items when deemed necessary. Each item is also contained in the appropriate PCG.

Referring to the training scenarios in Figure 9-4, Amn Smith entered training on JQS item 2l and 4b on 1 December 1996. After the training scenario, she was found qualified on equipment knowledge about the primary crash phone. She did not complete all the requirements for operating the primary crash phone. So how do you document the training on the individual's JQS? First, refer to the front page of the JQS for explanations on each column of the JQS. Second, observe that Amn Smith was opened up for training on both items on 1 Dec 96. She completed the training requirements for equipment knowledge about the primary crash phone on 7 Dec 96. To document certification, it requires the trainee's (TI) and trainer's (TR) initials. Do not fill in the completion date for operating the primary crash phone until Amn Smith has completed all the requirements and the trainer is satisfied with the performance. The training process for an individual in each air traffic control position, in each facility, is not complete until all the items in the JQS addressing that position has been completed.

TASKS AND TECHNICAL REFERENCES**CERTIFICATIONS**

TR	TOWER				RADAR		
	TSD	TCD	TI	TR	TSD	TCD	TI
2. EQUIPMENT: Define/Demonstrate the operation of:							
1. Primary Crash Phone TR: AFI 13-203, Chap 2	1 Dec 96	7 Dec 96	ABS	FPI			
4. CONTROL TOWER OPERATING PROCEDURES							
b. Operate Primary Crash Phone TR: AFI 13-203, Chap 2	1 Dec 96						
Figure 9-4							

REVIEW EXERCISE

1. Conduct a training scenario on any task item found in the position certification guide. After completion, fill out the following AF Form 623a example. (Note: This may not be an example of the locally generated AF Form 623a used at the unit)

TRAINING EVALUATION		DATE:
NAME:		TODAY
TOTAL		
DATE ENTERED TRAINING:		SIMULATOR:
POSITION/BLOCK:		NONPOSITIONAL:
BLOCK TIME ALLOTTED:		LIVE:
TOTAL TIME USED:		
DATE ENTERED TRAINING:		
TRAINING OBJECTIVES:		
OBJECTIVES MET:		
AREAS REQUIRING CORRECTIVE ACTION:		
CORRECTIVE ACTION:		
OTHER COMMENTS:		
TRAINEE COMMENTS:		

2. Using the monthly training requirement in your facility, correctly annotate studying for the training, and completing the test.

TASK OR RECURRING TRAINING AND TECHNICAL REFERENCES	DATE COMPLETED	SIGNATURE OF CERTIFYING OFFICIAL	INITIAL OF TRAINEE	SCORE OR HOURS	TYPE	FRE-QUENCY	DUE DATE
____ Proficiency Training TR: CATCT Ltr					SS	M	
Dec Proficiency Test					W	M	

3. Correctly complete the following AFJQS 1C1X1-001 task item with a start date. Conduct a training scenario with your trainer or supervisor, and complete the remainder of the form.

TASKS AND TECHNICAL REFERENCES

CERTIFICATIONS

		TOWER			RADAR		
	TSD	TCD	TI	TR	TSD	TCD	TI
TR							

2. EQUIPMENT: Define/Demonstrate the operation of:								
1. Primary Crash Phone TR: AFI 13-203, Chap 2								
4. CONTROL TOWER OPERATING PROCEDURES								
b. Operate Primary Crash Phone TR: AFI 13-203, Chap 2								

TRAINEE NAME (Last, First MI)	INITIALS	SSAN
TRAINER (Printed Name)	WRITTEN INITIALS	

TASK AND TECHNICAL REFERENCES

CERTIFICATION

	TSD	TCD	TI	TR
1. Controller Development Program (CDP)				
a. Explain the CDP TR: AFI 13-203, Chap 6, Atchs 11&12; AT-M-01				
b. Explain/Apply CDP Operating Instruction TR: AFI 13-203, Chap 6, Atch 11; CDP OI; AT-M-01				
c. Explain/Apply Facility Master Training Plan TR: AFI 13-203, Chap 6, AFMAN 36-2247, Chap 2; CDP OI; AT-M-01				
d. Explain Instructional System Development (ISD) TR: AFMAN 36-2234; AFI 13-203, Atch 12; AFMAN 36-2247; AT-M-01				
e. Explain the Purpose/Use of Career Field Education & Training Plan (CFETP) TR: 1C1X1 CFETP; AFI 36-2245, Chap 2; AT-M-01				
f. Explain/Use Field Evaluation Questionnaires (FEQs) TR: AT-M-01; CFETP				
g. Explain Purpose of Training Review Board (TRB) TR: AFI 13-203, Chap 6; AT-M-01				
2. Air Traffic Control Training				
a. Explain Upgrade, Qualification, Review, Recurring, & On-the-Job Training TR: AFI 36-2201, Terms; AFMAN 36-2247, Chap 2; AFI 13-203, Chap 6				
b. Explain/Demonstrate How to Plan/Conduct the Following Training:				
(1) Position Certification Training TR: AFI 13-203, Chap 6; AT-M-01; Position Certification Guides (PCG)				
(2) Radar Simulator Training TR: AFI 13-203, Chap 6; CDP OI; PCG; ATCTD Manual; AT-M-01				
(3) Computer Based Training (CBT) TR: AFI 13-203, Chap 6; AFIND25; CDP OI; PCG; AT-M-01				
(4) Non-Radar Training TR: AFI 13-203, Chap 6; ATCTD Manual; CDP OI; PCG; AT-M-01				
(5) Three-Level Task Evaluation Procedures TR: AFI 36-2201, Chap 3; AFI 13-203, Chap 6; CDP OI; 1C1X1 STS; FEQ				

	TSD	TCD	TI	TR
(6) Newcomer's Indoctrination Program TR: AFI 13-203, Chap 6; AT-M-01; AT-M-08; CDP OI				
c. Training Qualifications and Responsibilities TR: AFI 36-2201, Chap 4; AFI 13-203, Chap 6; CDP OI; AT-M-01				
d. Explain/Apply Recommendations for Position Certification/Facility Rating TR: FAR Part 65, Subpart A & B; FAAO 7220.1A, Chap 4&5; AFI 13-203, Chap 6, 7, & 8; CDP OI; PCG; AT-M-01				
e. Explain/Apply EDIT Procedures TR: AFI 13-203, Chap 6; CDP OI; AT-M-01				
f. Explain ATC Withdrawal Procedures TR: AFI 13-203, Chap 9 & Atchs 3-10; AT-M-01				
3. Evaluation and Documentation Procedures				
a. Explain Components of Effective Feedback/Evaluation TR: AFI 13-203, Chap 6; AFMAN 36-2247, Chap 5; CDP OI; AT-M-01				
b. Explain/Apply Performance Feedback/Evaluation TR: AFI 13-203, Chap 6; CDP OI; AFMAN 36-2234, Chap 8; AT-M-01				
c. Explain/Apply AF Form 623 Documentation Procedures TR: AFI 13-203, Chap 6; AFMAN 36-2247, Chap 5; CDP OI; PCG; AT-M-01; AFJQS 1C1X1-001& 002; AF Forms 623a, 797, 1098, 1000; CFETP				
d. Explain Air Traffic Control Testing and Certification Procedures TR: AFI 13-203, Chap 6, 7& 8; AFMAN 36-2234, Chap 5; AT-M-01				
4. Training & Learning Principles/Techniques				
a. Explain/Apply Principles of Learning TR: AFMAN 36-2234, Chap 2; AT-M-01				
b. Explain Adult Learning Strategies TR: AT-M-01				
c. Explain/Apply Effective Communications With Trainee TR: AT-M-01				
d. Explain Purpose of Understanding Trainee Attitude/Behavior TR: AT-M-01				